

Attachment A

STATEMENT OF WORK

for

Response Action Contracts



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Response Action Contract (RAC)
Statement of Work

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Response Action Contract (RAC)

STATEMENT OF WORK

I. BACKGROUND

This Response Action Contract provides professional architect/engineer, technical, and management services to the Environmental Protection Agency (EPA) to support remedial response, enforcement oversight and non-time critical removal activities in Region **FIELD(1)**, **FIELD(2)**, under the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Contract services include performance of site management; remedial investigation and feasibility studies; engineering services to design remedial actions; construction management for implementing remedial actions, including issuing and managing subcontracts for construction of the selected remedy and engineering services in overseeing construction; engineering evaluation and cost analysis for non-time critical removal actions; enforcement support, including oversight of remedial investigations/feasibility studies, remedial design, remedial action, removal action, and negotiation support; and other technical assistance, including community relations, sampling and analysis support, risk assessment, and pre-design investigations. Services may include technical and management services supporting EPA's coordination and oversight of remedial activities where they are performed by a State, the U.S. Army Corps of Engineers (USACE), or responsible parties identified in enforcement actions. Services would also support Superfund activities under the Brownfields Initiative.

The activities encompassed in this Response Action Contract Statement of Work (SOW) are presently contracted by the EPA through three resources. Remedial activities are performed under the Alternative Remedial Contracting Strategy (ARCS) contracts; enforcement oversight is done under the Technical Enforcement Support (TES) and Enforcement Support Services (ESS) contracts; and non-time critical removals are done through the Emergency Response Cleanup Services (ERCS) contracts. The Response Action Contracts will follow and replace the current ARCS contracts. TES, ESS and ERCS contracts will continue, with responsibility for enforcement oversight and non-time critical removals transferred to the Response Action Contracts.

The procurement of Response Action Contracts implements the remedial action component of the Superfund's Long-Term Contracting Strategy (LTCS) (OSWER Directive 9242.6-07.FS). The LTCS prescribes an integrated "one program" approach to enforcement and site cleanup to reduce handoffs, and decentralizes contract management to the EPA Regions. In concert with the "one program" approach to enforcement and response, the LTCS integrates remedial, enforcement oversight, and non-time critical removal responsibilities into this single Response Action Contract (RAC) structure.

The Response Action Contracts are envisioned to play a major role in the effective implementation of the Superfund Accelerated Cleanup Model (SACM). The purpose of SACM is to streamline and accelerate Superfund site cleanups. SACM supports early action to reduce immediate risk to human health and the environment. This will be accomplished through integration of remedial and removal activities, with focus on removing redundancies in the site assessment process and creating a one-step site screening and risk assessment process. In line with this effort, the Response Action Contracts have been designed to accomplish non-time critical removals as well as traditional Superfund remedial actions. Tasks under the work areas defined in the Statement of Work will be specified, as needed, in work assignments, and their scope may be modified to reduce redundancies and accelerate cleanups.

II. GENERAL CONTRACT REQUIREMENTS

The purpose of this contract is to obtain professional architect/engineer, technical, and management services in support of EPA's remedial response, enforcement oversight, and non-time critical removal activities at sites of

RAC Statement of Work

release or threatened release of hazardous substances in Region **FIELD(1)**, **FIELD(2)**, under the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). This contract will not provide the above services for activities on Federal facilities.

Implementation of the Statement of Work

When conducting activities under this contract, the contractor shall operate in accordance with all environmental statutes as appropriate, including the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended, the Clean Water Act/Oil Pollution Act as amended, the Clean Air Act as amended, the National Contingency Plan as amended and the Toxic Substances Control Act as amended.

For the purpose of this SOW, the words "The contractor shall" means that the firm will, in accordance with applicable laws, regulations, guidance and policies furnish the personnel, services, materials, equipment, knowledge, and expertise to successfully complete the tasks required under this contract. Any and all services and products shall be delivered in compliance with all applicable Federal, state, and local laws, regulations, guidance and policies, and will be adjusted to reflect those applicable laws, regulations, guidance, and policies which become effective after the effective date of this contract.

Work Breakdown Structure

The Statement of Work (SOW) is presented in a Work Breakdown Structure (WBS) format. The contractor shall utilize the SOW Work Breakdown Structure, as presented in this SOW and supplemented through individual Work Assignments, for project scoping, scheduling, and technical and cost tracking and reporting.

The WBS is comprised of Work Areas, Tasks, and Subtasks. Work Areas, Tasks, and potential Subtask activities are identified in the Statement of Work. Subtasks may be specified in individual Work Assignments. The contractor shall be required to track and report activities and costs down to the Subtask level if specified in individual Work Assignments.

The SOW work breakdown structure showing Work Areas and Tasks is depicted in Exhibit II-1. Work Areas are organized into four categories:

- o Program Support Work Areas
- o Fund-Lead Site Specific Work Areas
- o Enforcement Support Site Specific Work Areas
- o Other Technical Assistance Site Specific Work Areas

The WBS specifies a Work Area Code, an Activity Code, and a Task Category Code for each Work Area and tasks under each Work Area. These work breakdown structure codes shall be used to identify Work Areas in project scoping, scheduling, and technical and cost tracking and reporting.

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

- PROGRAM SUPPORT WORK AREAS -

MOBILIZATION

Work Area Code: MO

Action Code: QC

Tasks (Task Category Code)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Project Planning and Support (PP) 2. Information Controls and Reporting (IC) 3. Standard Operating Procedures (SP) | <ol style="list-style-type: none"> 4. Team Subcontracts (TB) 5. Pollution Liability Insurance (LI) 6. Work Assignment Close Out (CO) |
|---|---|

EQUIPMENT (NON-SITE SPECIFIC)

Work Area Code: EQ

Action Code: JU

Tasks (Task Category Code)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Project Planning and Support (PP) 2. Mobilization (MO) 3. Equipment Acquisition (EA) | <ol style="list-style-type: none"> 4. Equipment Maintenance (EM) 5. Tracking and Reporting (TR) 6. Work Assignment Close Out (CO) |
|---|--|

ONGOING ADMINISTRATIVE SUPPORT

Work Area Code: OA

Action Code: QC

Tasks (Task Category Code)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Project Planning and Support (PP) 2. Contract Integrity (CI) 3. Information Control and Reporting (IC) | <ol style="list-style-type: none"> 4. Administrative Support Services (AT) 5. Work Assignment Close Out (CO) |
|---|--|

ONGOING TECHNICAL SUPPORT

Work Area Code: OT

Action Code: JU

Tasks (Task Category Code)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Project Planning and Support (PP) 2. Technical Support Services (TS) | <ol style="list-style-type: none"> 3. Pollution Liability Insurance (LI) 4. Work Assignment Close Out (CO) |
|--|--|

CONTRACT CLOSEOUT	
Work Area Code: CC	Action Code: QU
<u>Tasks</u> (Task Category Code) <ol style="list-style-type: none"> 1. Project Planning and Support (PP) 2. Records Management (RM) 3. File Maintenance and Disposition (FM) 4. Reconciliation of Contract Utilization and Costs (RU) 	<ol style="list-style-type: none"> 5. Final Allocation of Costs (FA) 6. Preparation of Final Reports (FN) 7. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

- FUND-LEAD SITE SPECIFIC WORK AREAS -

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

Work Area Code: RI

Action Code: CO (RI/FS Combined), RI (Remedial Investigation),
FS (Feasibility Study)

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Field Investigation (FI)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)
7. Assessment of Risk (RA)
8. Treatability Study/Pilot Testing (TT)

9. Remedial Investigation Report (RR)
10. Remedial Alternatives Screening (RS)
11. Remedial Alternatives Evaluation (RE)
12. FS Report and RI/FS Report (FS)
13. Post RI/FS Support (PR)
- ~~14. Negotiation Support (NG)~~
15. Administrative Record (AR)
16. Work Assignment Close Out (CO)

REMEDIAL DESIGN

Work Area Code: RD

Action Code: RD

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Data Acquisition (DA)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)
7. Treatability Study/Pilot Testing (TT)

8. Preliminary Design (PD)
9. Equipment/Services/Utilities (ES)
10. Intermediate Design (ID)
11. Pre-final/Final Design (FD)
12. Post Remedial Design Support (DS)
13. Work Assignment Close Out (CO)

REMEDIAL ACTION Work Area Code: RA

Action Code: RA (Remedial Action), LR (Long Term Response Action)

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Development and Update of Site Specific Plans (DU)
4. Procurement of Subcontract (PB)
5. Management Support (MS)
6. Detailed Resident Inspection (Resident Engineer) (RI)

7. Cleanup Validation (CV)
8. Remedial Action Implementation (Subpool Activities) (AI)
9. Project Performance (PJ)
10. Project Completion and Close Out (PC)
11. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

NON-TIME CRITICAL REMOVAL SUPPORT (EE/CAs)

Work Area Code: NS

Action Code: EE

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Site Characterization (SC)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)
7. Assessment of Risk (RA)

8. Identification and Screening of Removal Alternatives (IS)
9. Analysis of Removal Alternatives (AL)
10. Engineering Evaluation/Cost Analysis (EE/CA) Report (EE)
11. Post EE/CA Support (PE)
12. Administrative Record (AR)
13. Work Assignment Close Out (CO)

NON-TIME CRITICAL REMOVAL ACTION

Work Area Code: NA

Action Code: RV

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Development and Update of Site Specific Plans (DU)
4. Non-Time Critical Removal Design Support (ND)
5. Procurement of Subcontract (PB)
6. Management Support (MS)
7. Detailed Resident Inspection (Resident Engineer) (RI)

8. Non-Time Critical Removal Validation (NV)
9. Non-Time Critical Removal Action Implementation (Subpool Activities) (NI)
10. Project Performance (PJ)
11. Project Completion and Close Out (PC)
12. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

- ENFORCEMENT SUPPORT SITE SPECIFIC WORK AREAS -

RI/FS OVERSIGHT

Work Area Code: RS

Action Code: BD

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Field Investigation (FI)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)
7. Assessment of Risk (RA)
8. Treatability Study/Pilot Testing (TT)

9. Remedial Investigation Report (RR)
10. Remedial Alternatives Screening (RS)
11. Remedial Alternatives Evaluation (RE)
12. FS Report and RI/FS Report (FS)
13. Post RI/FS Support (PR)
14. Administrative Record (AR)
15. Work Assignment Close Out (CO)

NEGOTIATION SUPPORT

Work Area Code: NG

Action Code: FN (RI/FS), AN (RD/RA), RN (Removal)

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Negotiation Support (NG)
3. Document Review (DR)

4. Post ROD Cost Analysis (RC)
5. Work Assignment Close Out (CO)

RD/RA OVERSIGHT (Note: While RD Oversight & RA Oversight are both under this Work Area, separate work assignments for RD Oversight and for RA Oversight are issued, and therefore separate Work Area Codes and Action Codes are used.)

Work Area Code: RO (RD Oversight), RX (RA Oversight)

Action Code: BE (RD Oversight), BF (RA Oversight)

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Data Acquisition (DA)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)

6. Data Evaluation (DE)
7. Review of PRP RD/RA Submittals (RP)
8. Remedial Action Oversight (RO)
9. Technical Meeting Support (TM)
10. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE**REMOVAL OVERSIGHT**

Work Area Code: VO

Action Code: BB

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations (CR)
3. Field Investigation (FI)
4. Sample Analysis (SN)
5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)

7. Review of PRP Removal Submittals (RQ)
8. Removal Oversight (VO)
9. Technical Meeting Support (TM)
10. Administrative Record (AR)
11. Work Assignment Close Out (CO)

LITIGATION SUPPORT

Work Area Code: LS

Action Code: LT

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Document Collection (DC)
3. Expert Witness Support (EW)

4. Technical Assistance (TA)
5. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

- OTHER TECHNICAL ASSISTANCE SITE SPECIFIC WORK AREAS -

COMMUNITY RELATIONS

Work Area Code: CR (Remedial); CS (Removal); or CT (Enforcement)

Action Code: CR(Remedial); RC(Removal); or EL (Enforcement)

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Community Relations Plan (CP)
3. Public Meeting/Public Hearing Support (PM)
4. Fact Sheet Preparation (FP)
5. Proposed Plan Support (PL)

6. Public Notices (PN)
7. Information Repositories (IR)
8. Site Mailing List (ML)
9. Responsiveness Summary Support (SU)
10. Work Assignment Close Out (CO)

SAMPLING AND ANALYTICAL SUPPORT

Work Area Code: AN (Remedial); AO (Removal); or AP (Enforcement)

Action Code: LA

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Environmental Sampling (EN)
3. Sample Analysis (SN)
4. Analytical Support (AO)

5. Data Validation (DV)
6. Data Evaluation (DE)
7. Characterization and Disposal of Field Generated Waste (CD)
8. Work Assignment Close Out (CO)

PRE-DESIGN INVESTIGATION

Work Area Code: PI

Action Code: DE

Tasks (Task Category Code)

1. Project Planning and Support (PP)
2. Treatability Study/Pilot Testing (TT)
3. Field Investigation (FI)
4. Sample Analysis (SN)

5. Analytical Support and Data Validation (AN)
6. Data Evaluation (DE)
7. Pre-design Engineering Report (ER)
8. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

TREATABILITY STUDY/PILOT TESTING	
Work Area Code: PT	Action Code: CO (RI/FS), RD (Remedial Design), BD (RI/FS Oversight)
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Treatability Study/Pilot Testing (TT) 3. Sample Analysis (SN) 4. Analytical Support and Data Validation (AN)	5. Data Analysis and Interpretation (DI) 6. Treatability Study/Pilot Test Report (TP) 7. Work Assignment Close Out (CO)
ASSESSMENT OF RISK	
Work Area Code: RK (Remedial) or RL (Enforcement)	Action Code: JF (Ecological Risk), ED (Human Health Risk Assessment)
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Identification of Existing Information (II) 3. Data Acquisition (DA) 4. Sample Analysis (SN)	5. Analytical Support and Data Validation (AN) 6. Data Evaluation (DE) 7. Assessment of Risk (RA) 8. Work Assignment Close Out (CO)
PRELIMINARY ASSESSMENT FOR SITE ASSESSMENT	
Work Area Code: PA	Action Code: PA
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (non-site specific) (PQ) 2. Work Assignment Close Out (CO)	3.- n. Site Specific Activities (SS)
SITE INSPECTION FOR SITE ASSESSMENT	
Work Area Code: SI	Action Code: SI
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (non-site specific) (PQ) 2. Work Assignment Close Out (CO)	3.- n. Site Specific Activities (SS)
HRS PACKAGE PREPARATION FOR SITE ASSESSMENT	
Work Area Code: HR	Action Code: HR
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (non-site specific) (PQ) 2. Work Assignment Close Out (CO)	3.- n. Site Specific Activities (SS)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE

SITE SECURITY AND MAINTENANCE	
Work Area Code: SS (Remedial); ST (Removal); or SU (Enforcement)	Action Code: PD
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Site Maintenance (SM)	3. Site Security/Guard Services (GS) 4. Work Assignment Close Out (CO)
DESIGN ASSISTANCE	
Work Area Code: DA	Action Code: DA
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Technical Assistance (TA)	3. Work Assignment Close Out (CO)
FIVE-YEAR REVIEW	
Work Area Code: FR	Action Code: FE
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Document Review (DR) 3. Standards (ARAR) Review (SR) 4. Site Visit/Interviews (SV)	5. Site Inspection/Technology Review (SI) 6. Five-year Review Report (FR) 7. Work Assignment Close Out (CO)
RECORDS MANAGEMENT AND ADMINISTRATIVE SUPPORT	
Work Area Code: RM (Remedial); RN (Removal); or RT (Enforcement)	Action Code: SW
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Site File Organization (SO) 3. Administrative Record (AR)	4. Administrative Support (AS) 5. Work Assignment Close Out (CO)
REAL PROPERTY ACQUISITION SUPPORT	
Work Area Code: RP (Remedial); RQ (Removal); or RR (Enforcement)	Action Code: RL
<u>Tasks</u> (Task Category Code) 1. Project Planning and Support (PP) 2. Property Acquisition (PA)	3. Work Assignment Close Out (CO)

EXHIBIT II-1 SOW WORK BREAKDOWN STRUCTURE	
TECHNICAL ASSISTANCE	
Work Area Code: TA (Remedial); TB (Removal); or TC (Enforcement)	Action Code: TA
Tasks (Task Category Code) 1. Project Planning and Support (PP) 2. Expert Technical Assistance (ET)	3. Work Assignment Close Out (CO)
INTEGRATED SITE ASSESSMENT/INVESTIGATION	
Work Area Code: SA (Remedial); or SB (Enforcement)	Action Code: EA
Tasks (Task Category Code) 1. Project Planning and Support (PP) 2. Initial Site Discovery/Screening Support (SD)	3. Integrated Sampling/Investigation Support (SA) 4. Work Assignment Close Out (CO)

Locational Data Policy

The contractor shall comply with all requirements related to the Agency's Location Data Policy (LDP) as described in EPA Publication 220 B-92-008 (March 1992 or latest revision) entitled, "Locational Data Policy Implementation Guidance: Guide to the Policy." The LDP assures the collection of accurate, consistently-formatted, and fully documented locational coordinated for facilities, sites, monitoring points, and observation points regulated or tracked under federal environmental programs within the Agency's jurisdiction. The LDP establishes principles for collecting and documenting geodetic coordinates defined in terms of latitude and longitude (lat/long). In addition to these locational data, LDP requires documentation of specific information regarding the method used to measure lat/long coordinate, the accuracy of the measurement, and a description of the place where the lat/long were taken. In order to effectively implement the LDP policy, the contractor shall collect and document the following information when collecting data under this contract:

- ! **Latitude/Longitude Coordinates:** Latitude and longitude coordinates shall be provided in accordance with the Federal Interagency Coordinating Committee for Digital Cartography (FICCDC) recommendations. The coordinates must define a point, line or area, according to the most appropriate data type fore the entity being represented (i.e., singly or multiple times).
- ! **Methodology Description:** The specific method used to determine lat/long coordinates shall be described (i.e., remote sensing techniques, map interpolation, cadastral survey).
- ! **Textual Description:** Each item shall be described in written text to which the lat/long coordinates refer (i.e, north-west corner of the site, entrance to the facility, point of discharge).
- ! **Estimation of Accuracy:** Measurements of accuracy related to lat/long coordinates shall be estimated in terms of the most precise units of measurement used.

III. WORK ASSIGNMENT WORK AREAS

The SOW Work Areas are organized and presented in the following categories:

- o Program Support Work Areas
- o Fund-lead Site Specific Work Areas
- o Enforcement Support Site Specific Work Areas
- o Other Technical Assistance Work Areas

Work assignments issued under the contract will include specific Work Areas and Tasks as defined in this SOW and may specify Subtasks.

A. PROGRAM SUPPORT WORK AREAS

The contractor shall provide for the efficient contract administration and program support activities to plan, monitor, and control all work assignments issued under this contract, and to assure that all work assignments are completed in a timely, cost-effective, and highly competent manner. The Program Support work assignments shall provide the means to carry out specific generic activities that are not directly or indirectly applicable to site specific work assignments.

The contractor shall perform the following Program Support activities as directed in work assignments:

- Mobilization
- Equipment (non-site specific)
- Ongoing Program Support
 - Contract Integrity
 - Information Control and Reporting
 - Administrative and Technical Support Services
- Contract Close Out

Mobilization and contract close out are one-time events and work assignments will be issued at the start and end of the contract, respectively, for these Project Support activities. Work assignments for Program Support activities other than mobilization and contract close out will require ongoing support during the specified work assignment period of performance and will be issued periodically as determined necessary by the EPA. Funding applied to Program Support work assignments shall be recorded and tracked to reflect any different accounts and appropriations.

Program Support activities include but are not limited to the following.

MOBILIZATION

The contractor shall furnish personnel, services, materials, and equipment necessary to start up the Response Action Contract. Mobilization will result in contractor readiness to perform any and all site specific and program support work assignments. The overall time period and specific tasks for mobilization shall be determined during contract negotiations and authorized through a work assignment.

Mobilization encompasses activities necessary to ready the contractor's operation for initiating project performance. The work assignment will specify products and services required during mobilization. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

RAC Statement of Work - Mobilization

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Designation of a Program Support office to receive and process work assignments including the presence of an on-site Program Manager within thirty (30) calendar days of award. NOTE: The contractor shall designate an existing office; the costs associated with establishing a Program Support office are not billable to this contract.

TASK 2 INFORMATION CONTROLS AND REPORTING

This task includes work efforts related to the establishment of contract specific information and management controls and reports. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Implementation of work assignment progress controls and provide a sample report to monitor work assignment completion date and expenditure limits for level-of-effort (LOE) and Dollars within thirty (30) calendar days of award.
- o Modification of the contractor's existing management information system (MIS) to support contract requirements as delineated in the Statement of Work.
- o Records management will be in accordance with EPA's policies and procedures for records as well as the Federal Records Center's standards as provided by the Regional Records Management Officer and the National Archives and Records Administration.
- o Implementation of accounting and cost control procedures including the provision of standardized invoice and progress reports. The accounting system shall include the appropriate labor classifications defined under the contract and continuously update the information. The initial invoice and Progress Report shall be submitted on the twentieth (20th) day following the first month of the contract and on the twentieth (20th) day of every month thereafter until contract completion.

TASK 3 STANDARD OPERATING PROCEDURES

This task includes work efforts related to the modification of the contractor's standard operating procedures to meet minimum Agency requirements. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Revisions to the conflict of interest procedures.
- o Revisions to the contract wide quality assurance (QA) program, Quality Assurance Management Plan, and generic Quality Assurance Project Plan.
- o Revisions to the contractor's confidential business information management and control systems.

RAC Statement of Work - Mobilization

- o Revisions to the contract wide health and safety plan.
- o Revisions to the analytical services delivery plan.
- o Establishment of a Contract Lab Program (CLP) point of contact and gather necessary forms, hardware and software requirements of the CLP and non-CLP tracking.

TASK 4 TEAM SUBCONTRACTS

This task includes work efforts related to the award of team subcontracts and establishment and submission of the standard terms and conditions for pool subcontracts.

TASK 5 POLLUTION LIABILITY INSURANCE

This task includes work efforts related to the submission of costs to the Contracting Officer for approval for contract wide Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the contract.

TASK 6 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

EQUIPMENT (NON-SITE SPECIFIC)

The government may provide equipment to the contractor. Contractor receipt, evaluation, repair, and tracking of property used on a non-site specific basis shall be charged to this Program Support work area.

The determination of need, solicitation, procurement, and receipt of non-site specific equipment shall be conducted under this activity. The contractor shall furnish personnel, services, materials and equipment required to purchase equipment to be used at multiple sites.

The contractor shall manage equipment in accordance with EPA guidance including the following:

- o *EPA Contract Property Administration Requirements*, April, 1994 (or most recent revision)
- o *EPA Administrative Procedures Office of Information Resources Management ADP Approvals*, October 1989 (or most recent revision)

The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

RAC Statement of Work - Equipment (non-site specific)

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Perform project management (monitor costs, prepare Monthly Progress Report and Invoice).

TASK 2 MOBILIZATION

This task includes work efforts related to the receipt, evaluation, repair and tracking of property during the mobilization of this contract. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Review of excess property and identification of transfers within fifteen (15) calendar days of contract award.
- o Provision of proof of suitable warehouse space.
- o Providing information as necessary to assist in the cost benefit analysis of purchase *versus* lease including the costs associated with warehousing, maintaining, and calibrating the equipment.
- o Receipt of excess EPA equipment; determination of the working order or need for repair/replacement within thirty (30) calendar days of receipt.
- o Establishment of property records and provision of an equipment utilization reporting system.
- o Receiving, inspecting, and ensuring working order of equipment within thirty (30) calendar days of receipt.
- o Receipt of the excess Mobile Lab and determination of the working order or need for replacement of the equipment within thirty (30) days.

TASK 3 EQUIPMENT ACQUISITION

This task includes work efforts related to the acquisition of non-site specific property. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Identifying the need for specific equipment to be utilized at multiple sites under this contract.
- o Providing information as necessary to justify the need for proposed equipment purchases.
- o Provision of proof of suitable warehouse space.
- o Providing cost benefit analysis of purchase *versus* lease including the costs associated with warehousing, maintaining, and calibrating the equipment.

RAC Statement of Work - Equipment (non-site specific)

- o Receiving, inspecting, and ensuring working order of equipment within thirty (30) calendar days of receipt.
- o Establishing a property record for the equipment and adding the equipment to the utilization reporting system.

TASK 4 EQUIPMENT MAINTENANCE

This task includes work efforts related to the maintenance of non-site specific property. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Identifying and establishing the maintenance schedule in accordance with the manufacture's recommendations to assure the maximum life of the specific piece of equipment.
- o Provision of suitable warehouse space.
- o Receipt of excess EPA equipment; determination of the working order or need for repair/replacement within thirty (30) calendar days of receipt.
- o Receiving, inspecting, and ensuring working order of returning equipment within thirty (30) calendar days of receipt.

TASK 5 TRACKING AND REPORTING

This task includes work efforts related to the tracking and reporting of property under this contract. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Establishment and maintenance of property records and of an equipment utilization reporting system.
- o Establishing a property record for the additional equipment and adding the equipment to the utilization reporting system.
- o Tracking equipment procurement, utilization, and condition, and routinely preparing equipment status reports.

TASK 6 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

ONGOING ADMINISTRATIVE SUPPORT

The contractor shall furnish personnel, services, materials, and equipment required to assure the efficient contract administration and program support to plan, monitor and control all work assignments issued under this contract, and to assure that all work assignments are completed in a timely, cost-effective, and highly competent manner. All functions necessary to perform ongoing administrative support activities under this contract shall be provided on an ongoing basis for the duration of the contract. The level of activity under this work area shall be

RAC Statement of Work - Ongoing Administrative Support

determined by the Region and specified in Ongoing Administration Support work assignments. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Perform project management (monitor costs, prepare Monthly Progress Report and Invoice).

TASK 2 CONTRACT INTEGRITY

This task includes work efforts required to assure the integrity of the contract. The contractor shall perform the contract integrity activities in accordance with all applicable regulations and guidance. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conflict of interest (COI) disclosure prior to the acceptance of a site specific work assignment.
- o Maintenance of a Confidential Business Information (CBI) control system for obtaining and maintaining clearances as well as securing and controlling all paper and electronic files created.
- o Maintaining a QA/QC program for the contract and updating the Quality Management Plan as required.

Only non-site specific QA/QC shall be provided under this program support work area. The contractor is explicitly prohibited from charging any site specific QA/QC activities under this work area. Site specific QA/QC activities shall be performed and billed under the appropriate site specific work assignment.

- o Modifications to the management plan to reflect organizational, managerial, or procedural changes.
- o Generation and submission of reports related to the maintenance of contract integrity. Typical reports the contractor may be tasked to provide include but are not limited to:
 - Annual allocation
 - Financial monitoring reviews
 - Annual close out
- o Participating in and responding to Agency audits.

TASK 3 INFORMATION CONTROL AND REPORTING

This task includes work efforts required to collect, compile, and report contract information. Specifically, this task shall encompass the preparation of the summary (contract-level) portion of the monthly progress report, assembly of the individual work assignment reports portion of the monthly progress report, and compilation of the overall monthly progress report, as specified in the contract Reports of Work (Attachment B). Reports generated under this Program Support activity shall contain the data elements and be in the standard format specified in the contract Reports of Work (Attachment B).

RAC Statement of Work - Ongoing Administrative Support

All functions necessary to perform information control and reporting activities under this contract shall be provided on an ongoing basis for the duration of the contract. The level of activity under this work area shall be determined by the Region and specified in work assignments.

Contractor costs involved in the preparation of the summary progress report shall be chargeable to this Ongoing Administrative Support work area. Preparation of site specific work assignment reports shall be charged to the appropriate site specific work assignment under the "project planning and support" task. Only the *assembly* of the site specific work assignment reports into the overall progress report shall be chargeable to this Program Support work area.

TASK 4 ADMINISTRATIVE SUPPORT SERVICES

This task includes work efforts to provide overall contract administrative support services to plan, monitor, and control all work assignments issued under this contract, and to assure that all work assignments are completed in a timely, cost-effective, and competent manner.

All functions necessary to perform administrative support activities under this contract shall be provided on an ongoing basis for the duration of the contract. The level of activity under this work area shall be determined by the Region and specified in work assignments.

Administrative support is deemed to constitute those administrative, management, clerical, and secretarial activities to be performed by the Program Support Office and those support functions to be performed by the corporate office which are allocable to the Program Support Office for this contract. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Coordinating work assignments between the Region and the contractor project officers.
- o Identifying project needs in terms of manpower and subcontractor's resources.
- o Monitoring and controlling work assignments in terms of quality, schedules, and costs.
- o Activities associated with contract or multiple site Pollution Liability Insurance issues.
- o Contractor self-evaluation of program support activities.
- o Monitoring subcontractors, as required.
- o Attend meetings concerning contract operations.

The contractor is explicitly prohibited from charging the following items under this program support work assignment: self-evaluation of site specific activities/work assignments, preparation of site specific work assignment progress reports, management of subpool subcontractors, and/or regional and other managers' time spent on resolving site issues. These activities shall be performed under and charged to the appropriate site specific work assignments.

In addition, non-site specific and related travel will be restricted and shall be preapproved by the government.

TASK 5 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

RAC Statement of Work - Ongoing Administrative Support

ONGOING TECHNICAL SUPPORT

The contractor shall furnish personnel, services, materials, and equipment required to assure the efficient contract technical support associated with multiple site and are related to the site-specific work being conducted under this contract. All functions necessary to perform ongoing technical support activities under this contract shall be provided on an ongoing basis for the duration of the contract. The level of activity under this work area shall be determined by the Region and specified in Ongoing Technical Support work assignments. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Perform project management (monitor costs, prepare Monthly Progress Report and Invoice).

TASK 2 TECHNICAL SUPPORT SERVICES

This task includes work efforts to assure the efficient contract technical support associated with multiple site and are related to the site-specific work being conducted under this contract. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attending meetings concerning technical issues relevant to multiple work assignments.
- o Generation of Health and Safety plans for multiple site activities.
- o Generation of Quality Assurance Project Plans and/or conducting quality assurance/quality control associated with multiple site activities.
- o Preparation of technical guidance.
- o Activities associated with contract or multiple site training (with specific and prior project officer and contracting officer approval).
- o Development of operating procedures for multiple site activities.

In addition, non-site specific and related travel will be restricted and shall be preapproved by the government.

TASK 3 POLLUTION LIABILITY INSURANCE

This task includes work efforts related to the submission of costs to the Contracting Officer for approval for contract wide Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the contract.

RAC Statement of Work - Ongoing Technical Support

TASK 4 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

CONTRACT CLOSE OUT

The contractor shall furnish personnel, services, materials, and equipment required to close out the Response Action Contract. The contractor shall comply with the record retention procedures specified in FAR Subparts 4.7 and 4.8 (January 1, 1993). The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Perform project management (monitor costs, prepare Monthly Progress Report and Invoice).

TASK 2 RECORDS MAINTENANCE AND DISPOSITION

This task includes work efforts related to preparing and transferring all contract and site records to either EPA or the Federal Records Center. Written direction for the disposition of records will be provided by the Regional Records Management Officer (RMO). This task shall be performed in accordance with FAR Part 4-Administrative Matters.

TASK 3 EQUIPMENT TRANSFERS

This task includes work efforts related to the transfer of Government-furnished property/equipment. The "Contractor's Guide for Control of Government Property," EPA Guidance dated December 1988 (or latest revision) will be used as a standard in this process. The designated EPA Contract Property Administrator will provide written instructions for the disposition of contractor-acquired, leased, or Government-furnished property/equipment.

TASK 4 RECONCILIATION OF CONTRACT UTILIZATION AND COSTS

This task includes work efforts related to the reconciliation of the contract to the final utilization and cost quantities and amounts.

RAC Statement of Work - Contract Close Out

TASK 5 FINAL ALLOCATION OF COSTS

This task includes work efforts associated with the final allocation of program support costs to site specific accounts in accordance with Agency guidance.

TASK 6 PREPARATION OF FINAL REPORTS

This task includes work efforts in the preparation of the final report of this contract.

TASK 7 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

B. FUND-LEAD SITE SPECIFIC ACTIVITIES

Work assignments will be issued for sites that have been selected by EPA for fund-financed study and/or remedial action, where EPA has assumed the lead responsibility for managing the site. The activities to be performed shall be consistent with Section 300.68 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Section 121 of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

The standard tasks for performing Remedial Investigation/ Feasibility Studies (RI/FS), Remedial Designs (RD), Remedial Actions (RA), Non-Time Critical Removal Support, Non-Time Critical Removal Action, Enforcement Support, and Other Technical Assistance work areas are listed in Exhibit IV-1 and described in this section. Not all standard tasks nor all work activities described under each task will apply for every assignment.

The contractor shall avoid duplication of prior efforts in gathering and assimilating site information and recommend opportunities for early actions in order to reduce site risks as quickly as possible. The contractor shall utilize the most applicable and current regulations and guidance documents when conducting work. The contractor shall continually look for and implement ways to streamline activities and minimize costs without compromising quality. The contractor shall assign work to personnel at the appropriate professional and/or technical levels and with the appropriate skills to most efficiently perform tasks.

The contractor may be tasked to provide the services described in this section to other EPA Regions. These projects will be assigned on an exception basis (i.e., to resolve conflicts of interest, to obtain a contractor's technical expertise, to address a site-specific technical problem, or to resolve capacity issues).

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS)

The contractor shall furnish personnel, services, materials and equipment required to perform RI/FS activities in accordance with all applicable regulations and guidance including but not limited to OSWER Directive 9355.3-01, 10-88 (Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA). The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Conduct site visit .
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Develop a conceptual understanding of the site based on the evaluation of existing data (submit Technical Memorandum).
- o Identify likely response scenarios and potentially applicable technologies and operable units that may address site problems (submit Technical Memorandum).
- o Prepare conceptual exposure pathway analysis in accordance with Regional guidelines and OSWER Directives 9285.7-01B, 12/89 (Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A.) and 9285.7-01A (Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation Manual).
- o Initiate identification of Applicable or Relevant and Appropriate Requirements (ARARs) that may affect remedy selection.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The plan shall describe the data quality objectives and measures necessary to achieve adequate data for use in remedy selection.
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).

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- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.
- o Submit costs to the Contracting Officer for approval for RI/FS work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance. ***(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work, Attachment B, of this contract.)***

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the preparation and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct community interviews. EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Prepare Community Relations Plan (CRP).
- o Provide public meeting and/or open house support.
- o Prepare fact sheets.
- o Provide support for Proposed Plan in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Provide public hearing support.
- o Publish Public Notices in local newspapers serving the site community.
- o Maintenance of public information repositories.
- o Develop and update site mailing list.
- o Provide administrative and technical support for Responsiveness Summary.
- o Prepare presentation materials.

TASK 3 FIELD INVESTIGATION

This task includes work efforts to collect environmental data in support of the Remedial Investigation/Risk Assessment. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Site Reconnaissance.
 - Ecological resources reconnaissance.
 - Well inventory.
 - Existing well development and establishment of sampling points.
 - Landfill gas emission sampling.
 - Surface geophysical survey.
 - On-Site and residential well sampling.
 - Surface water sampling.
 - Soil Sampling.
 - Sediment sampling.
 - Leachate sampling.
 - Field Screening.
- o Mobilization/Demobilization.

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- o Hydrogeological Assessment.
 - Test boring and monitoring well installation and development.
 - Downhole geophysics.
 - Groundwater elevation measurements.
 - Surface water elevation measurements.
 - Hydraulic testing.
- o Soil Boring, Drilling, and Testing.
- o Environmental Sampling.
 - Field screening.
 - Groundwater sampling.
 - Surface soil sampling.
 - Soil boring/permeability sampling.
 - Surface water and sediment sampling.
 - Air monitoring.
- o Ecological Characterization.
 - Wetland and habitat delineation/function and value assessment.
 - Wildlife observations.
 - Benthic reconnaissance/community characterization.
 - Identification of endangered species and others of special concern.
 - Biota sampling/population studies.
 - Bioassays.
 - Bioaccumulation studies.
- o Geotechnical Survey.
- o Field generated waste characterization and disposal in accordance with Local, State and Federal Regulations.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.

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- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of RI analytical and field data. The data shall be entered into a Region-compatible computer data base and shall be utilized in the preparation of the RI and Risk Assessment Report tables, maps and figures. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data Reduction and Tabulation.
 - Soil boring and monitoring well logs.
 - Field sampling data.
 - Hydrogeological testing data.
 - Geophysical data (downhole geophysics, survey).
 - Analytical results.
- o Environmental Fate and Transport Modeling/Evaluation.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

TASK 7 ASSESSMENT OF RISK

This task includes work efforts to conduct a Baseline Risk Assessment and to prepare the necessary Risk Assessment documents. The objective of this assessment is to characterize and quantify where appropriate, the current and potential human health and environmental risks that would prevail if no further remedial action is taken.

The Risk Assessment must be done in accordance with the guidance, procedures, assumptions, methods and formats contained in:

- o Human Health Evaluation Manual Supplemental Guidance: "Standard Default Exposure Factors" OSWER Directive 9285.6-03 (EPA, March 25, 1991).
- o EPA Regional guidance as specified.
- o Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 540/1/-89, December 1989).

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- o Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation (EPA 540/1-89/001, March 1989).
- o Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008, September 1990).
- o Air/Superfund National Technical Guidance Study Series Volumes I, II, III, and IV (EPA 450/1-89-001, 002, 003, 004, July 1989).
- o Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document (EPA 600/3-89/013, March 1989).

The Baseline Risk Assessment shall be separated into two components: (1) Human Health Risk Assessment and (2) Ecological Risk Assessment. The Human Health Risk Assessment shall address the following:

- o Hazard identification.
- o Dose-response assessment.
- o Exposure assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

The Ecological Risk Assessment shall address the following:

- o Definition of objectives.
- o Characterization of site and potential receptors.
- o Selection of chemicals, indicator species, and end points for risk evaluation.
- o Exposure assessment.
- o Toxicity assessment/ecological effects assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

TASK 8 TREATABILITY STUDY/PILOT TESTING

This task includes work efforts related to the conduct of laboratory screening, bench-scale and pilot-scale treatability studies to determine the suitability of remedial technologies or alternatives to site conditions and problems. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Provide test facility and equipment.
- o Test and operate equipment.
- o Retrieve sample for testing.
- o Prepare Technical Memorandum.
- o Characterization and disposal of residuals in accordance with Local, State and Federal Regulations.

TASK 9 REMEDIAL INVESTIGATION REPORT

This task includes work efforts related to the preparation of findings once data has been evaluated. The RI shall provide information to assess risks to human health and the environment and to support the development, evaluation and selection of appropriate response alternatives. The task includes all draft and final reports. The RI report shall be written in accordance with "Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and "Guidance for Data Useability in Risk Assessment," (EPA/540/G-90/008),

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September 1990 (or latest revision).

The RI report shall include a discussion of the following:

- o Site Background.
- o Investigation.
 - Field Investigation and technical approach.
 - Chemical analyses and analytical methods.
 - Field methodologies (biological, surface water, sediment, soil boring, soil sampling, monitoring well installation, groundwater sampling, hydrogeological assessment).
- o Site Characteristics.
 - Geology.
 - Hydrogeology.
 - Meteorology.
 - Demographics and land use.
 - Ecological assessment.
- o Nature and Extent of Contamination.
 - Contaminant sources.
 - Contaminant distribution and trends.
- o Fate and Transport.
 - Contaminant characteristics.
 - Transport processes.
 - Contaminant migration trends.
- o Summary and Conclusions.

TASK 10 REMEDIAL ALTERNATIVES SCREENING

This task includes work efforts to develop appropriate remedial alternatives to undergo full evaluation (Task 12). The alternatives are to encompass a range including innovative treatment technologies consistent with the regulations outlined in the National Contingency Plan (NCP), 40 CFR Part 300 and the Guidance for Conducting Remedial Investigations and Feasibility studies under CERCLA (OSWER Directive 9355.3-01 and other OSWER Directives including 9355.4-03, October 18, 1989, and 9283.1-06, May 27, 1992, "Considerations in Ground Water Remediation at Superfund Sites"). Typical activities the contractor may be tasked to perform include but are not limited to:

- o Establish remedial action objectives.
- o Establish general response actions.
- o Identify and screen applicable remedial technologies.
- o Develop remedial alternatives in accordance with Section 300.430(e) of the NCP (1990).
- o Screen remedial alternatives for effectiveness, implementability and cost.
- o Prepare Technical Memorandum.

TASK 11 REMEDIAL ALTERNATIVES EVALUATION

This task includes efforts associated with the assessment of individual alternatives against each of the nine evaluation criteria and a comparative analysis of all options against the evaluation criteria. The analysis shall be consistent with the National Contingency Plan (NCP), 40 CFR Part 300 and shall consider the Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA (OSWER Directive 9355.3-01) and other pertinent OSWER guidance. EPA will make the determination regarding

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final selection of the remedial alternative.

The nine criteria the contractor shall employ in evaluation of remedial alternatives are:

- o Overall protection of human health and the environment.
- o Compliance with ARARs.
- o Long-term effectiveness and permanence.
- o Reduction in toxicity, mobility or volume through treatment.
- o Short-term effectiveness.
- o Implementability - technical and administrative.
- o Cost.
- o State acceptance.
- o Community acceptance.

TASK 12 FS REPORT AND RI/FS REPORT

This task includes work efforts related to the preparation of findings once remedial alternatives have been screened and evaluated. The task includes preparation of all draft and final reports. The Feasibility Study Report shall include a discussion of the following:

- o Feasibility Study Objectives.
- o Remedial Objectives.
- o General Response Actions.
- o Identification and screening of Remedial Technologies.
- o Remedial Alternatives Description.
- o Detailed Analysis of Remedial Alternatives (individual and comparative).
- o Summary and Conclusions.

TASK 13 POST RI/FS SUPPORT

This task includes efforts to support the Agency's Record of Decision (ROD). The final recommendation contained in the ROD shall represent the opinion and recommendation of EPA not that of the contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend public meetings, briefings, public hearings, technical meetings with PRPs.
- o Prepare presentation materials.
- o Provide technical assistance in the preparation of the Responsiveness Summary.
- o Provide technical assistance in the preparation of the Proposed Plan and Record of Decision (ROD).
- o Prepare Feasibility Study Addendum.

~~TASK 14 NEGOTIATION SUPPORT~~

~~This task includes efforts to support RD/RA negotiations. Under no circumstances shall the contractor develop or be privy to EPA negotiation strategies. The development of a negotiation strategy is the sole responsibility of Government officials. In addition, when attending negotiation sessions and meetings, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:~~

- ~~o Attend negotiation sessions and meetings.~~
- ~~o Review of Potentially Responsible Party (PRP) documents.~~

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- ~~o Technical assistance.~~
- ~~o Prepare Technical Memorandum.~~

TASK 15 ADMINISTRATIVE RECORD

This task includes work efforts related to the production of the Administrative Record. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meeting with EPA Work Assignment Manager (WAM), Site Attorney, and Administrative Record Coordinator.
- o Provide assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Draft Administrative Record Index in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Administrative Record Index.
- o Coordinate duplication of Administrative Record.
- o Assemble Administrative Record and Index.

TASK 16 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

REMEDIAL DESIGN

The Remedial Design stage includes the development of the actual design of the selected remedy. The contractor shall furnish personnel, services, materials and equipment required to prepare detailed plans, drawings and specifications for Remedial Actions. All activities shall be in conformance with the remedy selected and set forth in the Record of Decision (ROD), the removal action selected and set forth in the Action Memorandum, the Remedial Design, or otherwise directed by EPA. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Conduct site visit.
- o Develop work plan and associated cost estimate.
 - Prepare construction cost estimate.
 - Initiate discussion regarding 6% design limitation.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated

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- agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data and documents as directed by EPA.
- o Prepare Site Management Plan (SMP) that provides EPA with a written understanding of how access, security, contingency procedures, management responsibilities and field generated waste disposal are to be handled.
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses. Reference the RI/FS FSP as much as practicable.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). Reference RI/FS QAPP as much as practicable.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2). Reference RI/FS HSP as much as practicable.
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.
- o Submit costs to the Contracting Officer for approval for Remedial Design work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance. ***(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work, Attachment B, of this contract.)***

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the update and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Update Community Relations Plan (CRP) as directed by EPA WAM.
- o Prepare fact sheets.
- o Prepare or update site mailing list.
- o Provide public meeting and/or open house support.
- o Implementation of other Community Relations activities as identified by the site specific Community Relations Plan or EPA.
- o Prepare presentation materials.

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TASK 3 DATA ACQUISITION

This task includes work efforts to acquire additional data to support Remedial Design activities. The results of this effort as well as previous studies shall be used to define contaminant levels, other physical/chemical properties, and volume. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Environmental Survey.
- o Mobilization/Demobilization.
- o Test Boring and Monitoring Well Installation and Development.
- o Soil Boring, Drilling, and Testing.
- o Environmental Sampling.
 - groundwater sampling.
 - surface soil sampling.
 - soil boring/permeability sampling.
 - surface water and sediment sampling.
 - Air monitoring.
- o Physical/Chemical Testing (for treatment, handling or disposal).
- o Field generated waste characterization and disposal in accordance with Local, State and Federal Regulations.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.

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- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the analysis of data for incorporation into the design effort. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data reduction and tabulation.
- o Comparison of data acquired during design with historic data.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

TASK 7 TREATABILITY STUDY/PILOT TESTING

This task includes work efforts related to the conduct of laboratory screening, bench-scale and pilot-scale treatability studies of the selected remedy. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Provide test facility and equipment.
- o Test and operate equipment.
- o Retrieve sample for testing.
- o Prepare Technical Memorandum.
- o Characterization and disposal of residuals in accordance with Local, State and Federal Regulations.

TASK 8 PRELIMINARY DESIGN

This task includes work efforts related to the preparation of the preliminary design. Specific components the contractor may be tasked to prepare include the following:

- o Recommended project delivery strategy and scheduling.
- o Preliminary construction schedule, including project phasing.
- o Specifications outline.
- o Preliminary drawings.
- o Basis of design report.

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- o Preliminary cost estimate (+50 percent and -30 percent accuracy) prepared through the use of M-CACES Gold Cost Engineering System for Remedial Action.
- o A detailed statement of how all Applicable or Relevant and Appropriate Requirements (ARARs), Federal and State public health and safety environmental requirements and standards will be met.
- o Land Acquisition/Easement Requirements.
- o Technical Support to EPA/State/USACE in Land Acquisition.
- o Conduct and/or assist in Value Engineering screening.

TASK 9 EQUIPMENT/SERVICES/UTILITIES

This task includes efforts necessary to acquire long-lead equipment, services, and/or utilities identified during the preliminary design phase.

TASK 10 INTERMEDIATE DESIGN

This includes work efforts related to the preparation of the intermediate design. Specific components the contractor may be tasked to prepare include the following:

- o Update construction schedule.
- o Preliminary specifications.
- o Intermediate drawings.
- o Basis of design report.
- o Revised cost estimate (+30 percent and -15 percent accuracy) prepared through the use of M-CACES Gold Cost Engineering System for Remedial Action.
- o If required, a revised detailed statement of how all Applicable or Relevant and Appropriate Requirements (ARARs), Federal and State public health and environmental requirements and standards will be met.
- o An intermediate design review/briefing for EPA.
- o Initiate Value Engineering (VE) study if VE screening identified potential project savings.

TASK 11 PRE-FINAL/FINAL DESIGN

This task includes work efforts related to the preparation of the Pre-final design. Specific components the contractor may be tasked to prepare include the following:

- o Subcontract award document.
- o Pre-final design specifications.
- o Pre-final drawings.
- o Basis of design report/design analysis.
- o Revised cost estimate (+15 percent and -10 percent accuracy) prepared through the use of M-CACES Gold Cost Engineering System for Remedial Action.
- o A pre-final/final design review/briefing for EPA.
- o Bidability (offerability) and constructability reviews.
- o Revised Project Delivery Strategy.
- o The 100% design submittal shall include the final plans and specifications in reproducible format, final cost estimate and a schedule of the overall Remedial Action.

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- o Report results of Value Engineering (VE) study and incorporate accepted VE recommendations into final design.

TASK 12 POST REMEDIAL DESIGN SUPPORT

The contractor shall solicit the procurement, evaluate offers received and inform the EPA Contracting Officer of the best qualified/cost effective offer. (Award of the contract will be part of Remedial Action work assignment.) Specific activities the contractor may be asked to perform include but are not limited to the following:

- o Prebid (Pre-Solicitation) Activities.
 - Duplication and distribution of contract documents.
 - Advertising/soliciting of bids.
 - Issuing addenda.
 - Prebid (pre-solicitation) meetings.
 - Resolution of bidder (offeror) inquiries.
 - On-site visits.
 - Compilation of contract documents.
 - Resolicit bids/offers and repackage documents if necessary.
- o PreAward Activities.
 - Receipt of bids (offers).
 - Determination of responsive, responsible bidders (offerors).
 - Bid (offer) tabulation.
 - Bid (offer) analysis.
 - Receipt of follow-up items from lowest responsible bidder (offeror)
 - Review of EEO, MBE requirements, SDB subcontracting plans, etc.
 - Reference checks.
 - Request for consent from EPA.

Before Remedial Action field activities can begin, several site specific plans shall be written to establish procedures to be followed by the contractor in performing field, laboratory and analysis work in addition to community and agency liaison activities. These plans include but are not limited to:

- o Site Management Plan.
- o Sampling and Analysis Plan.
- o Health and Safety Plan.
- o Community Relations Plan.

The existing plans developed for the Remedial Design, amended at the direction of EPA WAM, may be used if appropriate.

TASK 13 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.

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- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

REMEDIAL ACTION

Implementation of the design remedy involves the procurement of a construction subcontractor(s) and construction management activities, in addition to technical and field engineering services. The contractor shall furnish personnel, services, materials and equipment required to perform Remedial Action Activities in accordance with the objectives of the Remedial Design. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Work assignment administration including progress reports and monthly invoicing.
- o Coordination with local and emergency response teams.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.
- o Submit costs to the Contracting Officer for approval for Remedial Action work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance. **(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work, Attachment B, of this contract.)**

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the preparation or modification and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Community Relations Plan.
Prepare and/or update the Community Relations Plan in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Other Community Relations Activities.
Maintain and update site information repositories; maintain EPA information contacts to monitor and respond to citizen concerns; attend and participate in citizens advisory or work groups in existence at the site as directed by the WAM; develop and distribute fact sheets and information updates; provide periodic news releases for local newspapers and other news media; conduct/attend public meetings and/or open houses as needed; maintain and update site public information mailing list.
- o Prepare presentation materials.

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TASK 3 DEVELOPMENT AND UPDATE OF SITE SPECIFIC PLANS

This task includes work efforts related to the preparation or modification of the site specific plans required to implement the remedial action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Update of construction management plan.
- o Sampling and analysis plan preparation for construction confirmation and QA/QC.
- o QA Project Plan.
- o Health & Safety Plan.

TASK 4 PROCUREMENT OF SUBCONTRACT

This task includes work efforts associated with the solicitation of subcontract(s) required to implement the remedial action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Prebid (Pre-Solicitation) Activities.
Duplication and distribution of contract documents; advertising/soliciting of bids (offers); issuing addenda; prebid meetings; resolution of bidder (offeror) inquiries; on-site visits; compilation of contract documents; resolicit bids/offers and repackage documents if necessary.
- o PreAward/Award Activities.
Receipt of bids (offers); determination of responsive, responsible bidders (offerors); bid (offer) tabulation; bid (offer) analysis; receipt of follow-up items from lowest responsible bidder (offeror); review of EEO, MBE requirements, SDB subcontracting plans, etc.; reference checks; request for consent from EPA; award of subcontract; notice of award.
- o Post Award Activities.
Post award meetings and preconstruction conference. Review of insurance, bonds, certificates, and documentation required by the specifications, especially permits. Set-up and acceptance of subcontractor schedule of values consistent with measurement and payment section. Establish guidelines for payment of selected items (materials) delivered to site but not yet installed. Review subcontractor activity schedule.
- o Submittal Review - Notice To Proceed.
Establish procedures for review of submittals. Review subcontractor submittals. Issue Notice To Proceed.
- o Review Revisions/Addendum to Subcontractor Submittals (optional).

TASK 5 MANAGEMENT SUPPORT

This task includes work efforts associated with the contract management and monitoring of the subcontract(s) required to implement the remedial action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Financial Management.
Review and approval of invoices, subcontract modifications, and work assignment amendments to include direct cost of change orders/financial tracking. Maintain a construction code of accounts and/or work breakdown structure for cost/schedule reporting purposes.

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- o Cost Monitoring.
Weekly and monthly tracking. Analyze progress payments and make recommendations including retaining and deviation from projected rates of expenditure. Monitor subcontractor compliance with Davis-Bacon and related acts requirements.
- o Engineering Support.
Review field logs, etc. Biweekly/weekly/monthly meetings.
- o Engineering Support Option.
Supplemental engineering support for field change requests, value engineering change proposals, non-conformance reports issued by resident engineer, and re-design activities.

TASK 6 DETAILED RESIDENT INSPECTION (Resident Engineer)

This task includes work efforts associated with the monitoring and documentation of the work being done at the site is in accordance with the design and all subcontract(s) documents (drawings, specifications and plans) and to assure the implementation of the remedial action at the site is protective of human health and the environment. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct/attend progress meetings.
- o Maintain field logs and daily diaries.
Provide advice on what is intended by subcontract documents, prepare sketches to reflect field conditions, check construction drawings submitted by construction subcontractors for compliance with design concept, prepare reports on inspections, make final inspection and prepare report. Monitor, update, and report construction progress. Review and recommend time extensions. Coordination with Home Office/ Management Support. Conduct regular Davis Bacon Act interviews on-site. (The WAM shall be informed regarding scheduling of such interviews so that he/she may be present on site.) EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Review and recommend action on value engineering change proposals; review and make recommendations for changes; provide advice on need and cost of proposed change orders, provide assistance in prevention and resolution of subcontractor claims, recommend approval or rejection of construction schedules.
- o Perform field testing, recommend action on health and safety considerations (e.g. site safety plan), monitor quality control procedures.

TASK 7 CLEANUP VALIDATION

This task includes work efforts associated with the provision of quality assurance monitoring and documentation of the work being done at the site is in accordance with the design and all subcontract(s) documents (drawings, specifications and plans) and to assure the implementation of the remedial action at the site is protective of human health and the environment. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Sampling.
Perform confirmatory sampling and analysis to include sample collection, shipping, analysis, and validation costs.
- o Cleanup Status Report.
Development of a report at the request of the WAM that describes the progress of the remedial action based upon sampling and analytical results.

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TASK 8 REMEDIAL ACTION IMPLEMENTATION (SUBPOOL ACTIVITIES)

This task includes work efforts related to the implementation of the remedy by the subcontractor(s) at the site is in accordance with the design and all subcontract(s) documents (drawings, specifications and plans).

Typical activities the contractor may be tasked to perform include but are not limited to:

- o Site specific pre-remedial action activities.
- o Site specific remedial action.
 - Secure site and establish operations area, including laying out of clean zone, waste/stage handling areas and decon areas.
 - Implementation of the remedy in accordance with the ROD or EE/CA and Remedial Design Plans and Specifications.
- o Site specific RA reserve (change orders).

This subtask is a reserve dedicated for funding of change orders. The reserve is usually 15% of the estimated subcontract cost depending on the nature of the job.

TASK 9 PROJECT PERFORMANCE

This task includes work efforts related to the implementation of the remedy by the subcontractor(s) at the site is in accordance with the design and all subcontract(s) documents (drawings, specifications and plans).

Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct prestart-up check-out; review O&M manual; describe and analyze potential operating problems; support training operation and maintenance of O&M staff, including State personnel; advise on conformity to applicable performance and operations requirements; determine cause of failure and develop corrective action report; review record development, laboratory procedures, process system, safety and emergency systems, and warranty files.
- o Evaluate equipment system performance, witness performance tests, gather and test samples.
- o (For the one year period and/or a long term response action) Operate and provide appropriate upkeep and maintenance of installed response action construction items including the facilities, equipment, and appropriate institutional controls such as fencing for the site in accordance with the Operation and Maintenance (O&M) Manual and Sampling and Analysis Plan (SAP) for a time period as specified in the work assignment.

TASK 10 PROJECT COMPLETION AND CLOSE OUT

This task includes work efforts related to the project completion and close out of the subcontract(s) associated with the remedy at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Demobilization.
- o Demobilization of Engineering Contractor including long term monitoring interface.
- o Pre-final/final Activities.

Consolidation of project needs, pre-final/final inspection and certification, direct final project demobilization and make lockout inspection.
- o Final Payment/Punch List.

Resolution/certification that project is built according to plans and specifications. Trial periods, shakedown, test or trial runs/burns.

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- o Remedial Action Report.
Prepare report in accordance with Remedial Action Report Fact Sheet OSWER Publication 9335.0-39FS.

TASK 11 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.
- o Prepare a report documenting the cost and performance of the remedy in accordance with the format specified in the work assignment.

NON-TIME CRITICAL REMOVAL SUPPORT (EE/CAs)

The contractor shall furnish personnel, services, materials and equipment required to perform Non-Time Critical Removal Support in accordance with "Engineering Evaluation Cost Analysis Guidance for Non-Time Critical Removal Actions" (EPA, 1987, or latest revision) and "Outline of EE/CA Guidance" (EPA, March 30, 1988, or latest revision). The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Conduct site visit.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data, including useability, as directed by EPA.
- o Develop data summaries as directed by EPA.
- o Compile existing site data and reports.
- o Identify significant data gaps that may limit ability to identify and evaluate removal alternatives.
- o Develop a conceptual understanding of the site based on the evaluation of existing data (submit Technical Memorandum).
- o Identify likely response scenarios and potentially applicable technologies and operable units that may address site problems (submit Technical Memorandum).
- o Prepare conceptual exposure pathway analysis in accordance with Regional guidelines and OSWER Directives 9285.7-01B, 12/89, 9285.7-01, 4/90 (Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A.) and 9285.7-01A (Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation Manual).

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- o Initiate identification of Applicable or Relevant and Appropriate Requirements (ARARs) that may affect selection of removal action.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The plan shall describe the data quality objectives and measures necessary to achieve adequate data for use in remedy selection.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.
- o Submit costs to the Contracting Officer for approval for Non-time Critical Removal Support work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance.
(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work, Attachment B, of this contract.)

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the preparation and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct community interviews. EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Prepare Community Relations Plan (CRP) in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Provide public meeting and/or open house support.
- o Prepare fact sheets.
- o Provide support for Engineering Evaluation/Cost Analysis in accordance with Regional requirements.
- o Provide public hearing support.
- o Publish Public Notices in local newspapers serving the site community.
- o Maintenance of public information repositories.
- o Develop and update site mailing list.
- o Prepare presentation materials.

TASK 3 SITE CHARACTERIZATION

This task includes work efforts to collect and analyze data in support of the Engineering Evaluation/Cost Analysis (EE/CA). Typical activities the contractor may be tasked to perform include but are not limited to:

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- o Field Investigation.
- o Site Reconnaissance.
 - Ecological resources reconnaissance.
 - Well inventory.
 - Existing well development and establishment of sampling points.
 - Landfill gas emission sampling.
 - Surface geophysical survey.
 - On-Site and residential well sampling.
 - Surface water sampling.
 - Soil Sampling.
 - Sediment sampling.
 - Leachate sampling.
 - Field screening.
- o Mobilization/Demobilization.
- o Hydrogeological Assessment.
 - Test boring and monitoring well installation and development.
 - Downhole geophysics.
 - Groundwater elevation measurements.
 - Surface water elevation measurements.
 - Hydraulic testing.
- o Soil Boring, Drilling, and Testing.
- o Environmental Sampling.
 - Field screening.
 - Groundwater sampling.
 - Surface soil sampling.
 - Soil boring/permeability sampling.
 - Surface water and sediment sampling.
 - Air monitoring.
- o Ecological Characterization.
 - Wetland and habitat delineation/function and value assessment.
 - Wildlife observations.
 - Benthic reconnaissance/community characterization.
 - Identification of endangered species and others of special concern.
 - Biota sampling/population studies.
 - Bioassays.
 - Bioaccumulation studies.
- o Geotechnical Survey.
- o Field generated waste characterization and disposal in accordance with Local, State and Federal Regulations.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples, including physical parameter testing. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of RI analytical and field data. The data shall be entered into a Region-compatible computer data base and shall be utilized in the preparation of the RI and Risk Assessment Report tables, maps and figures. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data Reduction and Tabulation.
 - Soil boring and monitoring well logs.
 - Field sampling data.
 - Hydrogeological testing data.
 - Geophysical data (downhole geophysics, survey).
 - Analytical results.
- o Environmental Fate and Transport Modeling/Evaluation.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

TASK 7 ASSESSMENT OF RISK

This task includes work efforts to conduct a Baseline Risk Assessment and to prepare the necessary Risk Assessment documents. The objective of this assessment is to characterize and quantify where appropriate, the current and potential human health and environmental risks that would prevail if no further remedial action is taken.

The Risk Assessment must be done in accordance with the guidance, procedures, assumptions, methods and formats contained in:

- o Human Health Evaluation Manual Supplemental Guidance: "Standard Default Exposure Factors" OSWER Directive 9285.6-03 (EPA, March 25, 1991).
- o EPA Regional guidance as specified.
- o Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 540/1/-89, December 1989).
- o Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation (EPA 540/1-89/001, March 1989).
- o Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008, September 1990).
- o Air/Superfund National Technical Guidance Study Series Volumes I, II, III, and IV (EPA 450/1-89-001, 002, 003, 004, July 1989).
- o Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document (EPA 600/3-89/013, March 1989).

The Baseline Risk Assessment shall be separated into two components: (1) Human Health Risk Assessment and (2) Ecological Risk Assessment. The Human Health Risk Assessment shall address the following:

- o Hazard identification.
- o Dose-response assessment.
- o Exposure assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

The Ecological Risk Assessment shall address the following:

- o Definition of objectives.
- o Characterization of site and potential receptors.
- o Selection of chemicals, indicator species, and end points for risk evaluation.
- o Exposure assessment.
- o Toxicity assessment/ecological effects assessment.
- o Risk characterization.
- o Limitations/uncertainties.
- o Site conceptual model.

TASK 8 IDENTIFICATION AND SCREENING OF REMOVAL ALTERNATIVES

This task includes work efforts to identify and screen removal alternatives appropriate to the purpose and scope of the Non-Time Critical Removal Action, that comply with ARARs to the maximum extent practicable.

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TASK 9 ANALYSIS OF REMOVAL ALTERNATIVES

This task includes efforts associated with the assessment of individual removal alternatives against the criteria of effectiveness, implementability and cost, in addition to a comparative analysis of the options. The contractor is also to recommend and conduct treatability studies at the direction of EPA. EPA shall determine the selected removal alternative.

TASK 10 ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) REPORT

This task includes work efforts related to the preparation of findings once data has been evaluated. The task includes all draft and final reports. The EE/CA Report shall include a discussion of the following:

- o Site Characterization.
 - Site description.
 - Site background.
 - Analytical data.
 - Site conditions that justify a removal action.
- o Risk Evaluation.
 - Human health risks.
 - Ecological risks.
 - Proposed cleanup levels.
- o Identification of Removal Action Objectives.
 - Statutory limits on removal actions.
 - Removal action scope.
 - Removal action schedule.
 - Applicable or Relevant and Appropriate Requirements.
- o Identification of Removal Action Alternatives.
- o Analysis of Removal Alternatives.
 - Effectiveness.
 - Implementability.
 - Cost.
- o Comparative Analysis.
- o Identification of ARARs.
- o Proposed Removal Action (to be drafted by EPA).
- o Evaluation of Post-Removal Site control activities necessary to sustain the integrity of the Removal Action.

TASK 11 POST EE/CA SUPPORT

This task includes efforts to support the Agency's Engineering Evaluation/Cost Analysis (EE/CA). Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend public meetings, briefings, public hearings, technical meetings with PRPs.
- o Provide technical assistance in the preparation of the Responsiveness Summary.
- o Provide technical assistance in the preparation of the Action Memorandum.

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TASK 12 ADMINISTRATIVE RECORD

This task includes work efforts related to the production of the Administrative Record. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meeting with WAM, Site Attorney, and Administrative Record Coordinator.
- o Provide assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Draft Administrative Record Index in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Administrative Record Index.
- o Coordinate duplication of Administrative Record.
- o Assemble Administrative Record and Index.

TASK 13 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

NON-TIME CRITICAL REMOVAL ACTION

Implementation of the design remedy involves the procurement of a construction subcontractor(s) and construction management activities, in addition to technical engineering services. The contractor shall furnish personnel, services, materials and equipment required to perform removal action activities in accordance with the objectives of the design. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan preparation and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Work assignment administration including progress reports and monthly invoicing.
- o Coordination with local and emergency response teams.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

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- o Submit costs to the Contracting Officer for approval for Non-time Critical Removal Action work assignment specific Pollution Liability Insurance, if the contractor plans to bill insurance premiums as a direct charge to the work assignment and there is no contract wide Pollution Liability Insurance. ***(NOTE: The Contractor shall track and report all costs associated with this sub-task separately and in accordance with the Reports of Work, Attachment B, of this contract.)***

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the preparation or modification and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Community Relations Plan.
Prepare and/or update the Community Relations Plan in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Other Community Relations Activities.
Maintain and update site information repositories; maintain EPA information contacts to monitor and respond to citizen concerns; attend and participate in citizens advisory or work groups in existence at the site as directed by the WAM; develop and distribute fact sheets and information updates; provide periodic news releases for local newspapers and other news media; conduct, attend, and provide support to public meetings and/or open houses as needed;
maintain and update site public information mailing list.
- o Prepare presentation materials.

TASK 3 DEVELOPMENT AND UPDATE OF SITE SPECIFIC PLANS

This task includes work efforts related to the preparation or modification of the site specific plans required to implement the removal action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Update of construction management plan.
- o Sampling and analysis plan preparation for construction confirmation and QA/QC.
- o QA Project Plan.
- o Health & Safety Plan.

TASK 4 NON-TIME CRITICAL REMOVAL DESIGN SUPPORT

This task includes work efforts related to any necessary design work and preparation of the plans, drawings and specifications to support the implementation of the non-time critical removal in accordance with the EE/CA. Specific components the contractor may be tasked to prepare include the following:

- o Preparation of project delivery strategy.
- o Preparation of a construction schedule, including project phasing.
- o Preparation of specifications.
- o Preparation of drawings.
- o A detailed statement of how all Applicable or Relevant and Appropriate Requirements (ARARs), Federal and State public health and safety environmental requirements and standards will be met.

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- o Land Acquisition/Easement Requirements.
- o Technical Support to EPA/State/USACE in Land Acquisition.
- o Conduct and/or assist in Value Engineering screening or studies.
- o Preparation of subcontract award document(s).
- o Basis of design report/design analysis.
- o Cost estimate (+15 percent and -10 percent accuracy) prepared through the use of M-CACES Gold Cost Engineering System for Remedial Action (software is available from the Region) or other software as approved by the EPA Project Officer.
- o A design review/briefing for EPA.
- o Bidability (offerability) and constructability reviews.
- o The 100% design submittal shall include the final plans and specifications in reproducible format, final cost estimate and a schedule of the overall Non-Time Critical Removal Action.

TASK 5 PROCUREMENT OF SUBCONTRACT

This task includes work efforts associated with the solicitation of subcontract(s) required to implement the removal action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Prebid (Pre-Offer) Activities.
Distribution of contract documents; advertising/soliciting of bids (offers); issuing addenda; prebid (pre-offer) meetings; resolution of bidder (offeror) inquiries; on-site visits; compilation of contract documents; resolicit bids/offers and repackage documents if necessary.
- o PreAward/Award Activities.
Receipt of bids (offers); determination of responsive, responsible bidders (offerors); bid (offer) tabulation; bid (offer) analysis; receipt of follow-up items from lowest responsible bidder (offeror); review of EEO, MBE requirements, SDB subcontracting plans, etc.; reference checks; request for consent from EPA; award of subcontract; notice of award.
- o Post Award Activities.
Post award meetings and preconstruction conference. Review of insurance, bonds, certificates, and documentation required by the specifications, especially permits. Set-up and acceptance of subcontractor schedule of values consistent with measurement and payment section. Establish guidelines for payment of selected items (materials) delivered to site but not yet installed. Review subcontractor activity schedule.
- o Submittal Review - Notice To Proceed.
Establish procedures for review of submittals. Review subcontractor submittals. Issue Notice To Proceed.
- o Review Revisions/Addendum to Subcontractor Submittals (optional).

TASK 6 MANAGEMENT SUPPORT

This task includes work efforts associated with the contract management and monitoring of the subcontract(s) required to implement the removal action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

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- o Financial Management.
Review and approval of invoices, subcontract modifications, and work assignment amendments to include direct cost of change orders/financial tracking. Maintain a construction code of accounts and/or work breakdown structure for cost/schedule reporting purposes.
- o Cost Monitoring.
Weekly and monthly tracking. Analyze progress payments and make recommendations including retaining and deviation from projected rates of expenditure. Monitor subcontractor compliance with Davis-Bacon and related acts requirements.
- o Engineering Support.
Review field logs, etc. Biweekly/weekly/monthly meetings.
- o Engineering Support Option
Supplemental engineering support for field change requests, value engineering change proposals, non-conformance reports issued by resident engineer, and re-design activities.

TASK 7 DETAILED RESIDENT INSPECTION (Resident Engineer)

This task includes work efforts associated with the monitoring and documentation of the work being done at the site in accordance with the design and all subcontract(s) documents (drawings, specifications and plans) and to assure the implementation of the removal action at the site is protective of human health and the environment. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct/attend progress meetings.
- o Maintain field logs and daily diaries.
Provide advice on what is intended by subcontract documents, prepare sketches to reflect field conditions, check construction drawings submitted by construction subcontractors for compliance with design concept, prepare reports on inspections, make final inspection and prepare report. Monitor, update, and report construction progress. Review and recommend time extensions. Coordination with Home Office/Management Support. Conduct regular Davis Bacon Act interviews on-site (WAM shall be informed regarding scheduling of such interviews so that he/she may be present on site). EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Review and recommend action on value engineering change proposals; review and make recommendations for changes; provide advice on need and cost of proposed change orders, provide assistance in prevention and resolution of subcontractor claims, recommend approval or rejection of construction schedules.
- o Perform field testing, recommend action on health and safety considerations (e.g., site safety plan), monitor quality control procedures.

TASK 8 NON-TIME CRITICAL REMOVAL VALIDATION

This task includes work efforts associated with the provision of quality assurance monitoring and documentation that the work being done at the site is in accordance with the design and all subcontract(s) documents (drawings, specifications and plans) and to assure the implementation of the removal action at the site is protective of human health and the environment. Typical activities the contractor may be tasked to perform include but are not limited to:

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- o Sampling.
Perform confirmatory sampling and analysis to include sample collection, shipping, analysis, and validation costs.
- o Cleanup Status Report.
Development of a report at the request of the WAM that describes the progress of the removal action based upon sampling and analytical results.

TASK 9 NON-TIME CRITICAL REMOVAL ACTION IMPLEMENTATION (SUBPOOL ACTIVITIES)

This task includes work efforts related to the implementation of the removal by the subcontractor(s) at the site in accordance with the design and all subcontract(s) documents (drawings, specifications and plans). Typical activities the contractor may be tasked to perform include but are not limited to:

- o Site specific pre-removal action activities.
- o Site specific removal action.
 - Secure site and establish operations area, including laying out of clean zone, waste/stage handling areas and decon areas.
 - Implementation of the remedy in accordance with the design plans and specifications.
- o Change order reserve.
This subtask is a reserve dedicated for funding of change orders. The reserve is usually 15% of the estimated subcontract cost depending on the nature of the job.

TASK 10 PROJECT PERFORMANCE

This task includes work efforts related to the implementation of the removal by the subcontractor(s) at the site in accordance with the design and all subcontract(s) documents (drawings, specifications and plans). Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct pre start-up check-out; Review O&M manual; describe and analyze potential operating problems; support training operation and maintenance of O&M staff, including State personnel; advise on conformity to applicable performance and operations requirements; determine cause of failure and develop corrective action report; review record development, laboratory procedures, process system, safety and emergency systems, and warranty files.
- o Evaluate equipment system performance, witness performance tests, gather and test samples.

TASK 11 PROJECT COMPLETION AND CLOSE OUT

This task includes work efforts related to the project completion and close out of the subcontract(s) associated with the removal action at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Demobilization.
Demobilization of Engineering Contractor including long term monitoring interface.
- o Pre-final Activities.
Consolidation of project needs, pre-final inspection and certification, direct final project demobilization and make lockout inspection.

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- o Final Payment/Punch List.
Resolution/certification that project is built according to plans and specifications. Trial periods, shakedowns, test or trial runs/burns.
- o After Action Report.
Prepare report in accordance with NCP.

TASK 12 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

C. ENFORCEMENT SUPPORT SITE SPECIFIC WORK AREAS

The contractor may be required to provide enforcement support under five Work Areas:

- o RI/FS Oversight
- o Negotiation Support
- o RD/RA Oversight
- o Removal Oversight
- o Litigation Support

Tasks that the contractor may be required to perform in these Work Areas are listed in Exhibit II-1 and described in this section. Not all standard Tasks nor all activities described under each task will apply for every assignment.

The contractor shall avoid duplication of prior efforts in gathering and assimilating site information and recommend opportunities for early actions in order to reduce site risks as quickly as possible. The contractor shall utilize the most applicable and current regulations and guidance documents when conducting work. The contractor shall continually look for and implement ways to streamline activities and minimize costs without compromising quality. The contractor shall assign work to personnel at the appropriate professional and/or technical levels and with the appropriate skills to most efficiently perform tasks.

The contractor may be tasked to provide the services described in this section to other EPA Regions. These projects will be assigned on an exception basis (i.e., to resolve conflicts of interest, to obtain a contractor's technical expertise, to address a site-specific technical problem, or to resolve capacity issues).

RAC Statement of Work - Non-Time Critical Removal Action

RI/FS OVERSIGHT

The contractor shall furnish personnel, services, materials and equipment required to perform oversight of Potentially Responsible Party (PRP) RI/FS activities. The contractor shall provide technical support to assist EPA in verifying that the PRP work is conducted in accordance with the Settlement Agreement (administrative order on consent or a judicial consent decree) statement of work. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Conduct site visit.
- o Review background documents as directed by EPA.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (1)(1) and (1)(2). The PRP Health and Safety Plan may be adopted by the contractor if appropriate.
- o Prepare a Field Sampling Plan (FSP) for split sampling activities.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Review PRP Work Plan at direction of EPA WAM and submit Technical Memorandum.
- o Prepare Technical Memorandum and schedule for interface of Risk Assessment activities. Address data transfer from PRP; schedule contingencies.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the preparation and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Conduct community interviews. EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Prepare Community Relations Plan (CRP).
- o Provide public meeting and/or open house support.
- o Prepare fact sheets.
- o Provide support for Proposed Plan in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Publish Public Notices in local newspapers serving the site community.
- o Maintenance of public information repositories.
- o Develop and update site mailing list.
- o Provide administrative support for Responsiveness Summary.
- o Prepare presentation materials.

TASK 3 FIELD INVESTIGATION

This task involves work efforts to provide technical field oversight for the purpose of documenting PRP performance of field work. A field logbook shall be kept by the contractor and provided to EPA. Typical activities the contractor may be asked to perform include but are not limited to the following:

- o Oversight and documentation of PRP field activities as directed by EPA WAM.
- o Collection of split samples.
- o Perform sampling/screening/assessment as directed by WAM.
- o Preparation of Technical Oversight Reports.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - RI/FS Oversight

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of split sampling data and the discussion of useability of all data. A report summarizing split sample results shall be submitted. The report shall include a discussion of analytical results, a comparison of PRP sampling data with the split samples analyzed by EPA and a discussion of any discrepancies.

TASK 7 ASSESSMENT OF RISK

The Agency is responsible for conducting Risk Assessments where the PRPs are performing RI/FS activities. As such, this task includes work efforts to conduct a Baseline Risk Assessment and to prepare necessary Risk Assessment documents. The objective of this assessment is to characterize and quantify where appropriate, the current and potential human health and environment risks that would prevail if no further remedial action is taken.

The Risk Assessment must be done in accordance with the guidance, procedures, assumptions, methods and formats contained in:

- o Human Health Evaluation Manual Supplemental Guidance: "Standard Default Exposure Factors" OSWER Directive 9285.6-03 (EPA, March 25, 1991).
- o EPA Regional guidance as specified.
- o Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 540/1/-89, December 1989).

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- o Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation (EPA 540/1-89/001, March 1989).
- o Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008, September 1990).
- o Air/Superfund National Technical Guidance Study Series Volumes I, II, III, and IV (EPA 450/1-89-001, 002, 003, 004, July 1989).
- o Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document (EPA 600/3-89/013, March 1989).

The Baseline Risk Assessment shall be separated into two components: (1) Human Health Risk Assessment and (2) Ecological Risk Assessment. The Human Health Risk Assessment shall address the following:

- o Hazard identification.
- o Dose-response assessment.
- o Exposure assessment.
- o Risk characterization.
- o Limitations/uncertainties.

The Ecological Risk Assessment shall address the following:

- o Definition of objectives.
- o Characterization of site and potential receptors.
- o Selection of chemicals, species and end points for risk evaluation.
- o Exposure assessment.
- o Toxicity assessment.
- o Risk characterization.
- o Limitations/uncertainties.

TASK 8 TREATABILITY STUDY/PILOT TESTING

This task involves work efforts to provide technical oversight of PRP Treatability Study/Pilot Testing. The activities the contractor may be tasked to perform include but are not limited to:

- o Review of PRP work plan for Treatability Study/Pilot Test.
- o Split Sampling.
- o Oversight of Treatability Study/Pilot Test activities.
- o Preparation of Technical Memorandum.

TASK 9 REMEDIAL INVESTIGATION REPORT

This task includes work efforts to review PRP Remedial Investigation (RI) reports. The contractor shall perform a technical review and generate comments in the form of a Technical Memorandum. The contractor shall identify data gaps that may be important for the Human Health and Ecological Risk Assessments and the Feasibility Study.

TASK 10 REMEDIAL ALTERNATIVES SCREENING

This task includes work efforts to review the PRP identification and screening of technologies and alternatives for technical adequacy. This review shall include the identification of technologies considered feasible but not addressed by the PRP. The contractor shall review and comment

RAC Statement of Work - RI/FS Oversight

whether the PRPs have followed screening procedures outlined in the NCP, 40 CFR part 300 and the Guidance for Conducting RI/FS Under CERCLA (OSWER Directive 9355.3-01).

TASK 11 REMEDIAL ALTERNATIVES EVALUATION

This task includes work efforts to review the PRP evaluation of remedial alternatives. The contractor shall comment whether the PRPs have followed evaluation procedures as outlined in the National Contingency Plan (NCP), 40 CFR Part 300 and the Guidance for Conducting RI/FS under CERCLA (OSWER Directive 9355.3-01). The contractor shall also provide a technical review of the PRP evaluation.

TASK 12 FS REPORT AND RI/FS REPORT

This task includes work efforts to review PRP Feasibility Study (FS) and Remedial Investigation/Feasibility Study (RI/FS) reports. The contractor shall perform a technical review and generate comments in the form of a Technical Memorandum.

TASK 13 POST RI/FS SUPPORT

This task includes efforts to support the Agency's Record of Decision (ROD). Typical activities of the contractor may be tasked to perform include but are not limited to:

- o Attend technical meetings, public meetings, briefings, public hearings.
- o Provide technical assistance in the preparation of the record of Decision (ROD).
- o Review PRP Feasibility Study (FS) Addendum.
- o Provide technical assistance in the preparation of the Responsiveness Summary.

TASK 14 ADMINISTRATIVE RECORD

This task includes work efforts related to the production of the Administrative Record. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meeting with WAM, Site Attorney and Administrative Record Coordinator.
- o Provide assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Draft Administrative Record Index in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Administrative Record Index.
- o Coordinate duplication of Administrative Record.
- o Assemble Administrative Record and Index.

TASK 15 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.

RAC Statement of Work - RI/FS Oversight

- o Use of microfiche, Microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

NEGOTIATION SUPPORT

The contractor shall furnish personnel, services, materials and equipment to support negotiations (Remedial Investigation/Feasibility Study, Remedial Design/Remedial Action, or Removal Action). The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 NEGOTIATION SUPPORT

This task includes work efforts related to attending and assisting in negotiation sessions and meetings. When attending negotiation sessions and meetings, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend negotiation sessions and meetings.
- o Provide technical assistance.

TASK 3 DOCUMENT REVIEW

This task includes work efforts related to review of and comment on enforcement documents. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Develop or review scopes of work for enforcement documents
- o Review of PRP submittals at the direction of the EPA WAM
- o Prepare Technical Memorandum.

TASK 4 POST ROD COST ANALYSIS

This task includes work efforts related to performance of a cost analysis for alternative site actions pursuant to issuance of the ROD. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - Negotiation Support

- o Identify the range of specific alternatives that could feasibly occur at the site under the selected remedy and assess the probability that each alternative will be implemented.
- o Estimate the cost of each of the alternatives.
- o Identify the implicit range of uncertainty associated with the cost estimate for each alternative under consideration.
- o Determine the uncertainty regarding the actual extent to which the remedial activity will take place.
- o Determine the probability that legislative requirements or actual operating experience at the Site will cause additional remedial activities to be required in the future.
- o For each potential cost element identified, indicate the point in time at which the cost might be incurred in order that proper discounting can take place.
- o Utilize a decision tree analysis to develop a distribution of net present values of potential cost outcomes.

TASK 5 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

RD/RA OVERSIGHT

The contractor shall furnish personnel, services, materials and equipment required to perform oversight of Potentially Responsible Party (PRP) RD/RA activities. The contractor shall provide technical support to assist EPA in verifying that the PRP work is conducted in accordance with the Settlement Agreement (administrative order on consent or a judicial consent decree) statement of work. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting with RPM to discuss oversight roles.
- o Conduct site visit.
- o Review background documents as directed by EPA.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (I)(1) and (I)(2). The RI/FS Health and Safety Plan may be modified for use by the contractor if appropriate.

RAC Statement of Work - RD/RA Oversight

- o Prepare a Field Sampling Plan (FSP) for split sampling activities.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Review PRP Work Plan at direction of EPA WAM and submit comments on the PRP's technical approach to meeting the remedial goals.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the update and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Update Community Relations Plan (CRP) as directed by EPA WAM.
- o Prepare fact sheets.
- o Update site mailing list.
- o Provide public meeting and/or open house support.
- o Implementation of other Community Relations activities as identified by the site specific Community Relations Plan or EPA in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Prepare presentation materials.

TASK 3 DATA ACQUISITION

This task involves work efforts to provide technical field oversight for the purpose of documenting PRP performance of field work. A field logbook shall be kept by the contractor and provided to EPA. Typical activities the contractor may be asked to perform include but are not limited to the following:

- o Oversight and documentation of PRP field sampling activities.
- o Collection of split samples during RD and RA.
- o Perform sampling/screening/testing/assessment (WAM will list locations, types, and numbers of samples in addition to PRP split samples required).
- o Preparation of Technical Oversight Reports at the completion of RD sampling and RA cleanup validation activities.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling. Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of split sampling data and the discussion of useability of all data. A report summarizing split sample results shall be submitted. The report shall include a discussion of analytical results, a comparison of PRP sampling data with the split samples analyzed by EPA and a discussion of any discrepancies.

TASK 7 REVIEW OF PRP RD/RA SUBMITTALS

This task involves work efforts to review PRP RD/RA submittals. The contractor shall perform a technical review and generate comments in the form of a Technical Memorandum. All final decisions regarding RD/RA submittals by PRPs shall remain the sole responsibility of EPA. The contractor shall consider the following factors during the review of documents:

- Technical requirements of the ROD, Consent Decree (CD) (with SOW), and ARARs.
- Standard professional engineering practices.
- Applicable statutes, EPA policies, directives and regulations.
- Spot checking design calculations to assess accuracy and quality of design activities and conformance with results of field data and treatability studies.
- Examination of planning and construction schedules for meeting project completion goals.
- Examination of the proposed construction schedule for meeting project completion goals.

Typical documents the contractor may be tasked to review and provide technical support on include but are not limited to the following:

- Workplans.
- Basis of Design Report.
- Design Criteria Analysis.
- List of RD Submittals.
- Remedial Design Packages (Preliminary, Intermediate, Pre-Final, and Final).
- Site Management Plan for Remedial Construction.
- Remedial Action Work Plan.
- List of Submittals by RA Contractor.
- O&M Plan.
- As Built Drawings.
- PRP Remedial Action Report.

TASK 8 REMEDIAL ACTION OVERSIGHT

This task includes work efforts to provide technical field oversight of PRP activities to ensure construction takes place in accordance with EPA accepted plans and specifications. The oversight activities shall also include observations regarding the manner in which the Quality Assurance and Health & Safety Plans are implemented. The amount of oversight will be dependent upon the type and complexity of the Remedial Action and is at the discretion of the EPA WAM. The contractor shall maintain a field logbook (including photographs as appropriate) which shall be provided to EPA. The contractor may provide oversight of O&M or Long-term Response Actions performed by PRPs. Any non-conformance with the ROD, CD, Plans, or other project documents shall be reported to the WAM.

TASK 9 TECHNICAL MEETING SUPPORT

This task includes efforts related to attendance at and documentation of technical meetings with EPA, the PRPs, the PRP contractor, and the State Agency. When attending meetings, contractor employees must identify themselves as employees of an EPA contractor.

RAC Statement of Work - RD/RA Oversight

TASK 10 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

REMOVAL OVERSIGHT

The contractor shall furnish personnel services, materials and equipment required to provide removal oversight support. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Conduct site visit.
- o Review background documents as directed by EPA.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (I)(1) and (I)(2). The PRP Health and Safety Plan may be adopted by the contractor if appropriate.
- o Prepare a Field Sampling Plan (FSP) for split sampling activities.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Review PRP Work Plan at direction of EPA WAM. Submit Technical Memorandum.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

RAC Statement of Work - Removal Oversight

TASK 2 COMMUNITY RELATIONS

This task includes work efforts related to the update and implementation of the Community Relations Plan (CRP) for the site. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Update Community Relations Plan (CRP) as directed by EPA WAM.
- o Prepare fact sheets.
- o Update site mailing list.
- o Provide public meeting and/or open house support.
- o Implementation of other Community Relations activities as identified by the site specific Community Relations Plan or EPA in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version).
- o Prepare presentation materials.

TASK 3 FIELD INVESTIGATION

This task involves work efforts to provide technical field oversight for the purpose of documenting PRP performance of field work. A field logbook shall be kept by the contractor and provided to EPA. Typical activities the contractor may be asked to perform include the following:

- o Oversight and documentation of PRP field activities as directed by EPA WAM.
- o Collection of split samples.
- o Perform sampling/screening/assessment as directed by WAM.
- o Preparation of Technical Oversight Reports.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.

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- Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of split sampling data and the discussion of useability of all data. A report summarizing split sample results shall be submitted. The report shall include a discussion of analytical results, a comparison of PRP sampling data with the split samples analyzed by EPA, and a discussion of any discrepancies.

TASK 7 REVIEW OF PRP REMOVAL SUBMITTALS

This task involves work efforts to review PRP submittals associated with planning and carrying out the removal action. The contractor shall perform a technical review and generate comments in the form of a Technical Memorandum. All final decisions regarding PRP submittals shall remain the sole responsibility of EPA. The following factors shall be considered during the review of documents:

- Technical requirements of the design.
- Standard professional engineering practices.
- Applicable statutes, EPA policies, directives and regulations.
- Spot checking design calculations to assess accuracy and quality of design activities.
- Examination of planning and construction schedules for meeting project completion goals.

Typical documents the contractor may be tasked to review include but are not limited to the following:

- Workplans.
- Designs (Preliminary, Intermediate, Pre-Final, and Final).
- Site Management Plan for Construction.
- Action Work Plan.

RAC Statement of Work - Removal Oversight

- O&M Plan.
- As Built Drawings.
- After Action Report.

TASK 8 REMOVAL OVERSIGHT

This task includes work efforts to provide technical field oversight of PRP activities to ensure construction takes place in accordance with EPA accepted plans and specifications. The oversight activities shall also include observations regarding the manner in which the Quality Assurance and Health & Safety Plans are implemented. The amount of oversight will be dependent upon the type and complexity of the Action and is at the discretion of the EPA WAM. The contractor shall maintain a field logbook (including photographs as appropriate) which shall be provided to EPA. The contractor shall provide oversight of O&M or Long-term Response Actions performed by PRPs.

TASK 9 TECHNICAL MEETING SUPPORT

This task includes efforts related to attendance at, and documentation of, technical meetings with EPA, the PRPs, the PRP contractor and the State Agency. When attending meetings, contractor employees must identify themselves as employees of an EPA contractor.

TASK 10 ADMINISTRATIVE RECORD

This task includes work efforts related to the production of the Administrative Record. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meeting with WAM, Site Attorney and Administrative Record Coordinator.
- o Provide assistance in compiling documents comprising of the Administrative Record File in accordance with EPA Regional guidance or other procedures as specified.
- o Prepare Draft Administrative Record Index in accordance with Regional guidance or other procedures as specified.
- o Prepare Administrative Record Index.
- o Coordinate duplication of Administrative Record.
- o Assemble Administrative Record and Index.

TASK 11 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, or microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

LITIGATION SUPPORT

The contractor shall furnish personnel services, materials and equipment required to provide litigation support. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

RAC Statement of Work - Litigation Support

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 DOCUMENT COLLECTION

This task includes efforts to produce site documents to support discovery activities.

TASK 3 EXPERT WITNESS SUPPORT

This task includes work efforts related to the preparation for and provision of expert testimony during litigation. The contractor shall not prepare testimony for expert witnesses who are EPA personnel.

TASK 4 TECHNICAL ASSISTANCE

This task includes work efforts related to technical assistance during litigation. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Review of documents.
- o Assist in preparation of affidavits.
- o Preparation and attendance at meetings.
- o Technical support at meetings with PRPs.

TASK 5 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

D. OTHER TECHNICAL ASSISTANCE SITE SPECIFIC WORK AREAS

The contractor may be required to provide specific technical support on a case-by-case basis. The intention of this section is to allow the issuance of specific work assignments for Work Areas listed below on an individual basis. These Work Areas may or may not be site specific. Note that certain of these Work Areas, such as community relations, are specified as Tasks under site specific Work Areas.

- o Community Relations.
- o Sampling and Analytical Support.
- o Pre-design Investigation.
- o Treatability/Pilot Testing.
- o Assessment of Risks.
- o Preliminary Assessment for Site Assessment.
- o Site Inspection for Site Assessment.
- o HRS Package Preparation for Site Assessment.
- o Site Security and Maintenance.
- o Design Assistance.
- o Five-Year Review.
- o Records Management and Administrative Support.
- o Real Property Acquisition Support.
- o Technical Assistance.

Tasks that the contractor may be required to perform in these Work Areas are listed in Exhibit II-1 and described in this section. Not all standard Tasks nor all activities described under each task will apply for every assignment.

The contractor shall avoid duplication of prior efforts in gathering and assimilating site information and when applicable recommend opportunities for early actions in order to reduce site risks as quickly as possible. The contractor shall utilize the most applicable and current regulations and guidance documents when conducting work. The contractor shall continually look for and implement ways to streamline activities and minimize costs without compromising quality. The contractor shall assign work to personnel at the appropriate professional and/or technical levels and with the appropriate skills to most efficiently perform tasks.

The contractor may be tasked to provide the services described in this section to other EPA Regions. These projects will be assigned on an exception basis (i.e., to resolve conflicts of interest, to obtain a contractor's technical expertise, to address a site-specific technical problem, or to resolve capacity issues).

COMMUNITY RELATIONS

The contractor shall furnish personnel, services, materials and equipment required to support the preparation and implementation of the Community Relations Plan for the site. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - Community Relations

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 COMMUNITY RELATIONS PLAN

This task includes work efforts to prepare and/or update a Community Relations Plan. The plan shall include a description of the site and the community, an overview of community involvement to date, community concerns regarding the site, in addition to required and suggested community relations activities. A list of elected officials, Agency representatives and other key contacts are to be included. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Review existing site information as directed by EPA.
- o Prepare for and conduct interviews in the site community. EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.
- o Prepare and submit Community Relations Plan (CRP).

TASK 3 PUBLIC MEETING/PUBLIC HEARING SUPPORT

This task includes work efforts to prepare for and provide support to the Agency at public informational meetings. When attending public meetings and open houses, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meetings with the EPA WAM and Community Relations Contact.
- o Provide support for meeting logistics.
- o Prepare slides and/or other audio-visual material.
- o Attend public meetings and/or open houses.
- o Provide stenographic support.
- o Prepare draft and final meeting summaries.
- o Prepare presentation materials.

TASK 4 FACT SHEET PREPARATION

This task includes work efforts to prepare and submit fact sheets regarding site activities. The fact sheets may include information regarding the Superfund process, site history, upcoming site activities and opportunities for public involvement in addition to information regarding the results of studies as well as plans for remediation. The contractor shall provide graphics at the direction of EPA. EPA shall approve Fact Sheets before distribution.

RAC Statement of Work - Community Relations

TASK 5 PROPOSED PLAN SUPPORT

This task includes work efforts to coordinate and assist in the preparation of the draft and final Proposed Plan describing the preferred alternative and other alternatives evaluated in the Feasibility Study. The Plan shall be prepared in accordance with "The NCP and EPA Community Relations in Superfund-A Handbook" (most current version). The plan shall also describe opportunities for involvement in the Record of Decision. The contractor shall provide graphics at the direction of EPA.

TASK 6 PUBLIC NOTICES

This task includes work efforts to coordinate and publish Public Notices in a local newspaper serving the site community. Public Notices shall be submitted to EPA for review and approval before publication. Copies of Public Notices shall be submitted to EPA for inclusion in the Administrative Record and information repositories.

TASK 7 INFORMATION REPOSITORIES

This task includes work efforts to maintain public information repositories. The contractor shall mail information or visit repositories to ensure site-related information is readily accessible, as requested by EPA.

TASK 8 SITE MAILING LIST

This task includes work efforts to develop and update the site mailing list to provide labels as needed by EPA for informational mailings to the community. Mailing lists are to be prepared in accordance with Regional format and content requirements.

TASK 9 RESPONSIVENESS SUMMARY SUPPORT

This task includes administrative and technical support for the Responsiveness Summary. The contractor shall provide assistance in compiling and summarizing comments received during the public comment period on the Proposed Plan and Feasibility Study.

TASK 10 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

SAMPLING AND ANALYTICAL SUPPORT

The contractor shall furnish personnel, services, materials, and equipment required to provide sampling and analytical support including long term monitoring. The following work breakdown structure shall be used for project scoping, scheduling, and technical and technical and cost tracking and reporting.

RAC Statement of Work - Sampling and Analytical Support

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes efforts related to project initiation and support. Typical activities the contractor will be tasked to perform include but are not limited to:

- o Attend project scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses to be performed.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Accommodate any external audit or review mechanism that EPA may require.
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 ENVIRONMENTAL SAMPLING

This task includes the work efforts to collect, prepare, and ship environmental samples. The contractor shall be required to choose analytical methods which provide data that are of definable quality and that are defensible according to EPA's Data Defensibility guidance. The contractor shall develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling. Sampling shall be performed in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:

- o Field screening.
- o Groundwater sampling.
- o Surface and subsurface soil sampling.
- o Surface water and sediment sampling.
- o Air monitoring and sampling.
- o Biota sampling.
- o Other types of media sampling and screening.

RAC Statement of Work - Sampling and Analytical Support

TASK 3 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to use a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 4 ANALYTICAL SUPPORT

This task involves scheduling, coordination, tracking, and oversight of sample analyses. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.

TASK 5 DATA VALIDATION

This task includes data validation and review of the useability of the data. Data validation is the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines. The data useability review assesses the useability of the data for its intended purpose. The contractor shall be required to provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of analytical data. The data shall be entered into either a Regional or national computer system. Typical activities that the contractor will be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data reduction and tabulation.
- o Data trend evaluation and/or modeling and submission of technical memoranda.
- o Addressing differing analytical results when samples are split between the government and private parties.

RAC Statement of Work - Sampling and Analytical Support

TASK 7 CHARACTERIZATION AND DISPOSAL OF FIELD GENERATED WASTES

This task includes work efforts to characterize and dispose of wastes generated by sampling activities. The contractor shall dispose of wastes in accordance with local, state, and Federal regulations.

TASK 8 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved storage technology.
- o Prepare a Work Assignment Close-Out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

PRE-DESIGN INVESTIGATION

The contractor shall furnish personnel, services, materials and equipment required to perform pre-design investigations. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The plan shall describe the data quality objectives and measures necessary to achieve adequate data.
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.

RAC Statement of Work - Pre-Design Investigation

- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 TREATABILITY STUDY/PILOT TESTING

This task includes work efforts related to the conduct of laboratory screening, bench-scale and pilot-scale treatability studies of the selected remedy. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Provide test facility and equipment.
- o Test and operate equipment.
- o Prepare Technical Memorandum.
- o Characterization and disposal of residuals in accordance with Local, State and Federal Regulations.

TASK 3 FIELD INVESTIGATION

This task includes work efforts to collect environmental data in support of pre-design activities. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Mobilization/Demobilization.
- o Hydrogeological Assessment.
 - Test boring and monitoring well installation and development.
 - Piezometer installation.
 - Downhole geophysics.
 - Groundwater elevation measurements.
 - Surface water elevation measurements.
- o Aquifer Pump Tests.
 - Test wells.
 - Observation wells.
 - Pump test water containment.
- o Soil Boring, Drilling, and Testing.
- o Environmental Sampling.
 - Field screening.
 - Groundwater sampling.
 - Surface soil sampling.
 - Soil boring/permeability sampling.
 - Surface water and sediment sampling.
 - Air monitoring.
- o Geotechnical Survey.
- o Field generated waste characterization and disposal in accordance with Local, State and Federal Regulations.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories

RAC Statement of Work - Pre-Design Investigation

procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of analytical data. The data shall be entered into a Region-compatible computer data base. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data reduction and tabulation.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

RAC Statement of Work - Pre-Design Investigation

TASK 7 PRE-DESIGN ENGINEERING REPORT

This task includes work efforts related to the preparation of findings once data has been evaluated. The report shall provide information regarding the significance of the results relative to the design of the remedy.

TASK 8 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

TREATABILITY STUDY/PILOT TESTING

The contractor shall furnish personnel, services, materials and equipment to support Treatability/Pilot Testing activities. The laboratory or field tests are to be designed to provide the data necessary to evaluate and, to implement one or more technologies. These studies generally involve characterizing untreated wastes and evaluating the performance of the technology under different operating conditions. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The plan shall describe the data quality objectives and measures necessary to achieve adequate data.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment
- o Prepare meeting minutes.

RAC Statement of Work - Treatability Study/Pilot Testing

TASK 2 TREATABILITY STUDY/PILOT TESTING

This task includes work efforts to execute the Treatability Study/Pilot Test. The contractor shall conduct laboratory screening, bench-scale and pilot-scale tests to determine the suitability of technologies or alternatives to site conditions and problems. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Provide test facility and equipment.
- o Test and operate equipment.
- o Retrieve sample for testing.

TASK 3 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 4 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.
- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.

RAC Statement of Work - Treatability Study/Pilot Testing

- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 5 DATA ANALYSIS AND INTERPRETATION

This task includes work efforts to summarize and evaluate the data collected to determine the validity or performance of the treatment process. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Determine quality of data and useability/limitations.
 - Assess precision, accuracy and completeness.
- o Data compilation.
- o Statistical analysis.

TASK 6 TREATABILITY STUDY/PILOT TEST REPORT

This task includes work efforts related to the preparation of findings. The task includes all draft and final reports. The report shall include a discussion of the following:

- o Introduction.
 - Site description.
 - Waste stream description.
 - Technology description.
 - Previous treatability studies at the site.
- o Conclusions and Recommendations.
- o Treatability Study Approach.
 - Test objectives and rationale.
 - Experimental design and procedures.
 - Equipment and materials.
 - Sampling and analysis.
 - Data management.
 - Deviations from the Work Plan.
- o Results.
 - Data analysis and interpretation.
 - Quality assurance/quality control.
- o Summary and Conclusions.

TASK 7 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

ASSESSMENT OF RISK

The contractor shall furnish personnel, services, materials and equipment required to conduct a Baseline Risk Assessment and to prepare the necessary Human Health and Ecological Risk Assessment documents. The objective of this assessment is to characterize and quantify where appropriate, the current and potential human health and environmental risks that would prevail if no further action is taken. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l)(1) and (l)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions to be used in cases where performance does not meet the standards of the program.
- o Develop/review qualifications of the laboratory for the given analytical requirements.
- o Procure, manage, and provide oversight of pool and Team subcontracts for analytical services.
- o Accommodate any external audit or review mechanism that EPA may require.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 IDENTIFICATION OF EXISTING INFORMATION

This task includes work efforts to review and interpret existing information. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Review of existing data.
- o Coordination with WAM to develop Data Quality Objectives (DQOs).
- o Identification of DQOs.
- o Identification of data gaps.

TASK 3 DATA ACQUISITION

This task includes work efforts to collect environmental samples. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Environmental Survey.
- o Field Screening.
- o Groundwater Sampling.
- o Surface Soil Sampling.
- o Soil Boring/Permeability Sampling.
- o Surface Water and Sediment Sampling.
- o Air Monitoring.
- o Biota Sampling.

TASK 4 SAMPLE ANALYSIS

This task includes the analysis of environmental and waste samples. The contractor may utilize or be directed to utilize a variety of mechanisms to implement this task including: field screening using mobile facilities or field portable equipment, the Contract Laboratory Program (CLP), laboratories procured under subpool or Team subcontracts, the Regional Environmental Services Division (ESD), the Environmental Response Team (ERT) laboratory, or Regionally procured laboratories.

This task consists exclusively of performance of sample analyses and production of analytical data.

TASK 5 ANALYTICAL SUPPORT AND DATA VALIDATION

This task includes work efforts involved in scheduling, coordination, tracking, and oversight of sample analyses and validation of analytical data produced. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect, prepare, and ship environmental samples in accordance with the Field Sampling Plan (FSP) (developed under Task 1). The following types of sampling may be required:
 - Field screening.
 - Groundwater sampling.
 - Surface and subsurface soil sampling.
 - Surface water and sediment sampling.
 - Air monitoring and sampling.
 - Biota sampling.
 - Other types of media sampling and screening.
- o Develop Data Quality Objectives (DQO) for each sampling event; these DQOs shall be the determinative factor for assessing the success or failure of the sampling.
- o Request, obtain, and perform oversight of analytical services in compliance with EPA requirements.
- o Coordinate with the EPA Sample Management Office(SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD) regarding analytical, data validation, and quality assurance issues.
- o Manage, track, and report status of site specific equipment
- o Implement the EPA-approved laboratory quality assurance program which provides oversight of in-house and subcontracted laboratories through periodic performance evaluation sample analyses and/or on-site audits of operations and has a system of corrective actions.

RAC Statement of Work - Assessment of Risk

- o Provide sample management including chain-of custody procedures, information management, sample retention, and 10-year data storage.
- o Perform data validation, the process by which the quality of the data, the defensibility of the data, and the chain of custody are verified. The contractor shall perform data validation in accordance with Regional guidelines.
- o Review data for useability for its intended purpose.
- o Provide reports on data validation and useability.

TASK 6 DATA EVALUATION

This task includes work efforts related to the compilation of analytical data. The data shall be entered into a Region-compatible computer data base. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Data useability evaluation/field QA/QC.
- o Data reduction and tabulation.
- o Data trend evaluation and/or modeling and submission of Technical Memorandum.

TASK 7 ASSESSMENT OF RISK

This task includes work efforts related to prepare a Human Health and Ecological Risk Assessment. The Risk Assessment must be done in accordance with the guidance, procedures, assumptions, methods and formats contained in:

- o Human Health Evaluation Manual Supplemental Guidance: "Standard Default Exposure Factors" OSWER Directive 9285.6-03 (EPA, March 25, 1991).
- o EPA Regional guidance as specified.
- o Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 540/1/-89, December 1989).
- o Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation (EPA 540/1-89/001, March 1989).
- o Guidance for Data Useability in Risk Assessment (EPA/540/G-90/008, September 1990).
- o Air/Superfund National Technical Guidance Study Series Volumes I, II, III, and IV (EPA 450/1-89-001, 002, 003, 004, July 1989).
- o Ecological Assessment of Hazardous Waste Sites: A Field and Laboratory Reference Document (EPA 600/3-89/013, March 1989).

The Baseline Risk Assessment shall be separated into two components: (1) Human Health Risk Assessment and (2) Ecological Risk Assessment.

The Human Health Risk Assessment shall address the following:

- o Hazard identification.
- o Dose-response assessment.
- o Exposure assessment.
- o Risk characterization.
- o Limitations/uncertainties.

RAC Statement of Work - Assessment of Risk

The Ecological Risk Assessment shall address the following:

- o Definition of objectives.
- o Characterization of site and potential receptors.
- o Selection of chemicals, species and end points for risk evaluation.
- o Exposure assessment.
- o Toxicity assessment.
- o Risk characterization.
- o Limitations/uncertainties.

TASK 8 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

PRELIMINARY ASSESSMENT FOR SITE ASSESSMENT

The contractor shall furnish personnel, services, materials and equipment to support preliminary assessment activities for site assessments. Preliminary assessments (PA) are intended to provide a preliminary screening of sites to facilitate the assignment of site priorities. EPA shall determine site priorities for placing sites on the National Priority List (NPL). The contractor shall conduct all preliminary assessments in accordance with "Guidance for Performing Preliminary Assessments under CERCLA," OSWER Directive 9345.0-01A, September 1991, or latest revision. Major activities include background research, a site reconnaissance, the generation of a PA report, and the generation of a preliminary HRS score. The EPA shall make the determination of final HRS scores. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT (NON-SITE SPECIFIC)

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare monthly progress reports and invoices.
- o Attend Agency-held training.
- o Prepare status reports updating field work, cost summaries, and report schedules.

RAC Statement of Work - Preliminary Assessment for Site Assessment

TASK 2 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

TASKS 3-n SITE SPECIFIC ACTIVITIES

Each of these tasks includes all activities related to a single site. Each site will be assigned a consecutively numbered task. Typical activities the contractor may be tasked to perform include but are not limited to the following:

- o Conduct site specific project planning.
- o Determine CERCLA eligibility and collection of background information.
- o Prepare site specific work plans.
- o Conduct field work activities including obtaining site access, on-site/off-site reconnaissance and preparation of trip report and other follow-up activities.
- o Provide invoice addendums to allocate costs site specifically.
- o Prepare draft and final PA report.
- o Prepare draft and revised HRS score for EPA review and determination of final HRS score.

SITE INSPECTION FOR SITE ASSESSMENT

The contractor shall furnish personnel, services, materials and equipment to support site inspection activities for site assessments. Site inspections (SI) are the second phase of an ongoing screening process used to determine whether a site has the potential to be included on the National Priorities List. EPA shall determine site priorities for placing sites on the National Priority List (NPL). This work area includes Screening Site Inspections and Expanded Site Inspections. All Site inspections shall be performed in accordance with "Guidance for Performing Site Inspections under CERCLA," OSWER Directive 9345.1-05, September 1992, Interim Final, or latest revision. Major activities include background research, field sampling, generation of an SI report, and generation of an HRS score. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT (Non-Site Specific)

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare monthly progress reports and invoices.
- o Attend Agency-held training.

RAC Statement of Work - Site Investigation for Site Assessment

- o Prepare status reports updating field work, cost summaries, and report schedules.

TASK 2 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

TASKS 3-n SITE SPECIFIC ACTIVITIES

Each of these tasks includes all activities related to a single site. Each site will be assigned a consecutively numbered task. Typical activities the contractor may be tasked to perform include but are not limited to the following:

- o Conduct site specific project planning.
- o Review existing information as directed by EPA including analytical data.
- o Determine CERCLA eligibility and collect background information.
- o Prepare site specific work plans.
- o Conduct field work activities.
 - obtain site access.
 - conduct on-site reconnaissance.
 - conduct sampling visit.
 - prepare trip report and other follow-up activities.
 - validate sampling data.
 - dispose of Investigation Derived Wastes.
- o Prepare site specific plans including:
 - Health and Safety Plan (HSP).
 - Sampling Plan.
 - QA Project Plan (QAPP).
 - Investigation Derived Wastes (IDW) Plan.
- o Provide invoice addendums to allocate costs site specifically.
- o Prepare draft and final SI report.
- o Prepare draft and revised HRS score for EPA review and determination of final HRS score.

HRS PACKAGE PREPARATION FOR SITE ASSESSMENT

The contractor shall furnish personnel, services, materials and equipment to support preparation of Hazard Ranking System (HRS) packages for site assessments. The Hazard Ranking System is a scoring system that evaluates the relative threat to public health and the environment posed by releases and potential releases of hazardous substances. The HRS score and the supporting documentation are compiled into an HRS package. EPA uses the information in this package to determine HRS scores, to determine priorities of sites for placement on the National Priority List (NPL), and to place sites on the NPL. Major activities in this work area include background research, generation of an estimated HRS score, preparation of a summary report or data gap memo if necessary, and the generation of an HRS documentation record. The

RAC Statement of Work - HRS Package Preparation for Site Assessment

following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT (Non-Site Specific)

This task includes efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare monthly progress reports and invoices.
- o Attend Agency-held training.
- o Prepare monthly status reports updating field work and report schedules.

TASK 2 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

TASKS 3-n SITE SPECIFIC ACTIVITIES

Each of these tasks includes all activities related to a single site. Each site will be assigned a consecutively numbered task. Typical activities the contractor may be tasked to perform include but are not limited to the following:

- o Conduct site specific project planning.
- o Collect background information.
- o Prepare estimated HRS score for EPA review and determination of final HRS score.
- o Prepare summary report or data gap memo.
- o Prepare HRS documentation record.

SITE SECURITY AND MAINTENANCE

The contractor shall furnish personnel, services, materials and equipment required to perform site security. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - Site Security and Maintenance

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l) (1) and (l)(2).
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 SITE MAINTENANCE

This task includes work efforts related to site maintenance.

TASK 3 SITE SECURITY/GUARD SERVICES

This task includes efforts to safeguard material and personnel working at the site. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Security services as necessary during field activities.
- o Maintain daily log including a listing of all personnel entering and exiting the site.
- o Comply with OSHA Regulation 29 CFR 1910, Hazardous Waste Operations and Emergency Response.

TASK 4 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

DESIGN ASSISTANCE

The contractor shall furnish personnel, services, materials and equipment required to perform design assistance activities. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - Design Assistance

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Conduct site visit.
- o Evaluate existing data as directed by EPA.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 TECHNICAL ASSISTANCE

This task includes technical assistance to the WAM during design activities. When attending public meetings, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend technical meetings, briefings at direction of EPA.
- o Provide assistance in the development and/or review of design packages.
- o Conduct and/or assist in Value Engineering (VE) screening.
- o Conduct and/or assist in VE study if VE screening identified potential project savings.
- o Report results of VE study.
- o Conduct and/or assist in the technical analysis of Value Engineering change proposals (VECPs).
- o Provide community relations support.
- o Provide technical assistance in the development of the bid package.

TASK 3 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

FIVE-YEAR REVIEW

The contractor shall furnish personnel, services, materials and equipment to assist EPA in performing five-year reviews in accordance with OSWER Directive 9355.7-02, "Structure and Components of Five-Year Reviews." The contractor shall consider all current and past activities at the site. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

RAC Statement of Work - Five-Year Review

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 (l) (1) and (l)(2).
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision). The QAPP shall identify the scope and complexity of the work, the project requirements and the methods of performing quality control inspections and test and reporting procedures.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 DOCUMENT REVIEW

This task includes work efforts to review documents and site files, at the direction of the EPA WAM, to become knowledgeable with the history and status of the site. Specific documents the contractor may be tasked to review include but are not limited to the following:

- o Record of Decision (ROD).
- o ROD Summaries.
- o Consent Decrees.
- o Close-out Reports.
- o Operation and Maintenance Manuals and Reports.
- o Groundwater Monitoring Plans.
- o Administrative Record.

TASK 3 STANDARDS (ARAR) REVIEW

This task includes a review of ARARs in the ROD(s) and the ROD Summary(s), and a review of Federal, State or Local regulations related to public health or the environment, promulgated subsequent to the ROD, for changes in standards.

TASK 4 SITE VISIT/INTERVIEWS

This task includes work efforts to interview, where appropriate, previous site staff/management, nearest residents to the site, Potentially Responsible Parties (PRPs), State and Local Government personnel, facility operating staff, O&M contractors, or other personnel associated with the selection and implementation of the Action. EPA personnel shall be present at interviews. At interviews, contractor employees must identify themselves as employees of an EPA contractor.

RAC Statement of Work - Five-Year Review

TASK 5 SITE INSPECTION/TECHNOLOGY REVIEW

This task includes work efforts to conduct a management system review and technical compliance evaluation of specific elements of the Action required to protect human health and the environment. The scope of the site inspection shall include all components of the source control/groundwater remediation to determine whether each element of the ROD(s) has been implemented and whether each component of the remedy is operating in accordance with its intended function.

TASK 6 FIVE-YEAR REVIEW REPORT

This task includes work efforts related to the preparation of a five-year review report providing information on how the implemented remedy satisfies the completion requirements and is protective of human health and the environment. The task includes all draft and final reports. The report shall include a discussion of the following:

- o Background information including an introduction, statement of objectives and a review of all ARARs.
- o Description of site conditions including a summary of the site visit and a discussion of areas of non-compliance of ARARs.
- o Summary of findings.
- o Preparation of review summary including technology recommendations, requirements for recommendation implementation and a general statement of protectiveness.
- o Summary of requirements to serve as the basis for subsequent five-year reviews, if required.

TASK 7 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

RECORDS MANAGEMENT AND ADMINISTRATIVE SUPPORT

The contractor shall furnish personnel, services, materials and equipment required to support the compilation of the site file and the Administrative Record. The site file shall contain all site-related documents including memoranda, correspondence, reports, photographs, lab data and other material produced or received by EPA. The Administrative Record is a subset of the site file containing documents that relate to public involvement and the selection of the Remedial Action. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

RAC Statement of Work - Records Management and Administrative Support

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate .
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.

TASK 2 SITE FILE ORGANIZATION

This task includes work efforts related to site file organization. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Collect all site files.
- o Organize documents according to Regional file structure in accordance with Regional guidance or other procedures as specified in the work assignment.

TASK 3 ADMINISTRATIVE RECORD

This task includes work efforts related to the production of the Administrative Record. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend meeting with WAM, Site Attorney, and Administrative Record Coordinator.
- o Provide assistance in compiling documents comprising the Administrative Record File in accordance with Regional guidance or other procedures as specified.
- o Prepare Draft Administrative Record Index in accordance with Regional guidance or other procedures as specified.
- o Prepare Administrative Record Index.
- o Coordinate duplication of Administrative Record.
- o Assemble Administrative Record and Index.

TASK 4 ADMINISTRATIVE SUPPORT

This task includes administrative support activities during the preparation of the site file and Administrative Record at the direction of the WAM.

TASK 5 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified.

RAC Statement of Work - Real Property Acquisition Support

REAL PROPERTY ACQUISITION SUPPORT

The contractor shall furnish personnel, services, materials and equipment required to provide support for property acquisition activities. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Evaluate existing data as directed by EPA.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site-specific equipment.

TASK 2 PROPERTY ACQUISITION

This task includes work efforts to assist in the acquisition of real property. Typical activities the contractor may be tasked to perform once property has been identified include but are not limited to:

- o Land Survey.
- o Obtain title evidence.
 - identify owner of the land.
 - identify any encumbrances of record on the property.
- o Obtain land appraisal.
- o Provide technical assistance during land negotiation.

TASK 3 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

TECHNICAL ASSISTANCE

The contractor shall furnish personnel, services, materials and equipment required to provide expert technical assistance support for a specific site. The following work breakdown structure shall be used for project scoping, scheduling, and technical and cost tracking and reporting.

RAC Statement of Work - Technical Assistance

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation and support. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting.
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide conflict of interest disclosure.
- o Conduct site visit.
- o Evaluate existing data as directed by EPA.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).
- o Manage, track, and report status of site specific equipment.
- o Prepare meeting minutes.

TASK 2 EXPERT TECHNICAL ASSISTANCE

This task includes providing expert knowledge to the EPA in a variety of technical areas, including but not limited to: lead, incineration, ground water treatment, non-aqueous phase liquids (NAPL), soil vapor extraction. When attending public meetings, contractor employees must identify themselves as employees of an EPA contractor. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend technical meetings and briefings at the direction of the EPA WAM.
- o Provide assistance in the development and/or review of technical information/documentation relating to the site (e.g., application of a specific technology on a specific site).
- o Provide community relations support.

TASK 3 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Close-out Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

INTEGRATED SITE ASSESSMENT/INVESTIGATION

The contractor shall furnish personnel, services, materials, and equipment required to support integrated site assessment and investigation activities. Integrated site assessment and investigation activities will generally be performed under the following conditions:

RAC Statement of Work - Integrated Site Assessment/Investigation

- o Public drinking water supplies are or may be contaminated with a hazardous substance;
- o Private wells are or may be contaminated with a hazardous substance above a health based benchmark;
- o Soils on school, day care center, or residential properties are or may be contaminated above background levels;
- o A hazardous substance is detected or suspected above background in an off-site air release in a populated area;
- o A highly toxic substance known to bioaccumulate has been or may have been discharged into surface waters; and/or
- o Sensitive environments are or may be contaminated with a hazardous substance above background levels.

Such sites are both potential removal candidates and potential NPL candidates, and an integrated site assessment may be warranted.

Activities performed pursuant to this requirement shall be in conformance with OSWER Directive 9345.1-6FS, September 1993 entitled, "Integrating Removal and Site Assessment Investigations (EPA/540-F-93-038)". The following work breakdown structure is to be used for project scoping, scheduling, and technical and cost tracking and reporting.

TASK 1 PROJECT PLANNING AND SUPPORT

This task includes work efforts related to project initiation. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Attend scoping meeting(s).
- o Develop work plan and associated cost estimate.
- o Negotiate work plan and make necessary revisions as a result of EPA comments and/or negotiated agreements.
- o Provide a conflict of interest disclosure.
- o Prepare a site specific Health and Safety Plan (HSP) that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 CFR 1910.120 1(1) and (1)(2).
- o Prepare a Field Sampling Plan (FSP) that describes the number, type, and location of samples and type of analyses.
- o Prepare a Quality Assurance Project Plan (QAPP) in accordance with EPA QA/R-5 (latest draft/revision).
- o Investigate cultural resources and environmental equity issues.
- o Attend Agency-held training.
- o Prepare status reports updating field work, cost summaries, and report schedules.
- o Perform site specific project management (monitor costs, prepare Monthly Progress Report and Invoice).

TASK 2 INITIAL SITE DISCOVERY/SCREENING SUPPORT

This task includes work efforts related to providing support to EPA during initial site discovery and screening. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Review EPA Form 9200-1, "Incident Notification Report" to become familiar with the project.

RAC Statement of Work - Integrated Site Assessment/Investigation

- o Provide technical support to EPA in its review of potential options for the project which include: no action, defer to other authority, emergency response, removal preliminary assessment, remedial preliminary assessment, or an integrated preliminary assessment.
- o Perform a site visit which may include the collection of the following data elements:
 - Current human exposure identification (option - determine the presence of multiple sources of risk and cumulative risk associated with the site and nearby sites)
 - Source identification including locations, sizes and volumes
 - Information on hazardous substances which are present
 - Labels on drums and/or containers
 - Containment evaluation
 - Evidence of releases
 - Location of wells on-site and in the immediate vicinity of the site
 - Runoff channels or pathways
 - Location of site or sources relative to surface water
 - Nearby wetlands evaluation
 - Nearby land uses
 - Distance measurements or estimates for wells, land uses, surface water and wetlands
 - Public accessibility to the site
 - Blowing soils and air contaminants
 - Photodocumentation of site conditions
 - Site sketches
 - Petroleum release
 - Fire/explosion threats
 - Urgency for need for response actions
 - Response and treatment technology evaluation
 - Pathway analysis
 - Perform environmental, media, waste and/or biota sampling (optional)
 - Perimeter survey
 - Number of people within 200 feet
 - Sensitive environments/species determination
- o Initiate and document a file search which may include:
 - Regulatory program files (e.g., RCRA, Water, State, County, etc.)
 - Site access information and property ownership
 - Site history and industrial processes
 - Substances used at the site
 - Past releases (substances, locations, and impacts)
 - Latitude and longitude
 - Topographic maps
 - Initiate collection of information related to delineation of potentially responsible parties
 - Treatment technology review
- o Review file search and site visit data and report results of this analysis to EPA.
- o Collection any information needed to complete a remedial site assessment (Preliminary Assessment) that was not part of the initial file search of site visit including:
 - Population within 1 and 4 miles
 - All private and municipal wells within 4 miles
 - Depth to groundwater

RAC Statement of Work - Integrated Site Assessment/Investigation

- Local or regional geology and climate
- Distance to surface water measured
- Fisheries along a 15 mile surface water migration pathway
- Sensitive environments along a 15-mile surface water pathway
- Size of wetlands
- Preliminary HRS score/PREscore

The contractor shall conduct all preliminary assessments in accordance with "Guidance of Performing Preliminary Assessments under CERCLA," OSWER Directive 9345.0-01A, September 1991, or latest revision.

- o Attend meetings with EPA

TASK 3 INTEGRATED SAMPLING/INVESTIGATION SUPPORT

This task includes work efforts related to providing support to the EPA for the current screening level SI (see section 2.1 of Guidance for Performing Site Inspection Under CERCLA, OSWER Directive 9345.1-05, September 1992) and any removal sampling activities not already addressed under Task 2. Activities performed pursuant to this task will occur when a remedial action is warranted and the site appears that it will be placed on the NPL. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Performing integrated SI/removal assessment sampling with the following emphasis:

Remedial SI Emphasis

- Attribution to the site
- Background samples
- Ground water samples
- Grab samples from residential soils
- Surface water sediment samples
- HRS factors related to surface water sample locations
- Strategic sampling for the HRS
- Use of routine analytical services (RAS) and Quick Turnaround Methods (QTM) available via the EPA Contract Laboratory Program (CLP) [Analytical services must be suitable for NPL listing purposes and data should be include the appropriate reporting requirements to allow for data validation at a later date if required]
- Full screening organic and inorganic analyses
- Definitive analyses
- Documentation including targets and receptors
- Computing HRS scores
- Standardized reports

Removal Assessment Emphasis

- Sampling from containers
- Physical characteristics of wastes
- Treatability and other engineering concerns
- Composite and grid sampling needs
- Rapid turnaround on analytical services
- Field/screening analyses
- PRP-lead removal actions

RAC Statement of Work - Integrated Site Assessment/Investigation

- Goal of characterizing site (e.g., defining extent of contamination)
- Focus on NCP removal action criteria

- o Providing a SI/removal assessment sampling report including a description of the analytical data quality procedures utilized to ensure collection of data needed for HRS observed releases.
- o Completing a HRS screening using PREScore (if not already done as part of previous site evaluation) and report the draft score to the Region prior to proceeding with the formal HRS package.
- o Upon Regional approval, preparing a draft HRS Package (including Site Summary, computerized HRS Score Sheets, Documentation Record, Figures, Maps, and References).
- o Responding to comments from the Region, EPA-Headquarters, and the Headquarters HRS Quality Assurance Contractor, and finalizing the formal HRS Package.

TASK 4 WORK ASSIGNMENT CLOSE OUT

This task includes efforts related to work assignment close out. Typical activities the contractor may be tasked to perform include but are not limited to:

- o Return of documents to EPA or other document repositories.
- o File duplication, distribution, and storage.
- o File archiving to meet Federal Records Center requirements.
- o Use of microfiche, microfilm, or other EPA-approved data storage technology.
- o Prepare a Work Assignment Closeout Report (WACR) in accordance with Regional guidance or other procedures as specified in the work assignment.

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